

"I was posted in Cochin from December '57 to April '60 and give here a list of birds which I observed within the area of the Naval Base on Willingdon Island situated between Ernakulam and Fort Cochin. The Naval Base consists of a large open airfield area, a Canal running through it and a built-up area consisting of domestic & technical buildings with large flowering trees and shrubs. The harbour area and backwaters have been excluded.

- | | |
|-----------------------------|-------------------------------|
| 1. Pariah Kite | 23. Blue rock Pigeon |
| 2. Brahminy Kite | 24. Little Green Bittern |
| 3. Spotted Owl | 25. Snake Bird |
| 4. Cattle Egret | 26. Curlew |
| 5. Red Wattled Lapwing | 27. Paddy Bird |
| 6. Yellow Wattled Lapwing | 28. Common Sandpiper |
| 7. Little Ringed Plover | 29. Golden Oriole |
| 8. Small Indian Skylark | 30. Purple rumped Sunbird |
| 9. Indian Pipit | 31. White Breasted Kingfisher |
| 10. Large Pied Wagtail | 32. Common Indian Kingfisher |
| 11. White Wagtail | 33. Koel |
| 12. Black Drongo | 34. Magpie Robin |
| 13. Steaked Fantail Warbler | 35. Tickell's Flower pecker |
| 14. Ashy Wren Warbler | 36. Rose-ringed Parakeet |
| 15. Tailor Bird | 37. Common Green Bee eater |
| 16. Shikra | 38. Large Green Bee eater |
| 17. Red Rumped Swallow | 39. House Crow |
| 18. Palm Swift | 40. Jungle Crow |
| 19. Bay-backed Shrike | 41. Common Myna |
| 20. Rufous-backed Shrike | 42. House Sparrow |
| 21. Common Wood Shrike | |
| 22. Blue Jay | |

I was not particularly successful in drawing up a comprehensive list of birds in the Mattancherry, Fort Cochin and Ernakulam areas and it would be of interest to compare such a list with the one given above if some enthusiast(s) in these areas could make one available. Any takers?"

N.S. Tyabji
Naval Headquarters,
NEW DELHI.

"We sincerely hope that your efforts to form an Ornithological Society will soon bear fruit. Please note that we shall be only too glad to join the same."

M.A. Rashid
Hony. Secretary,
Wild Life Club,
DEHRA DUN.

"What I had in mind is that you should take some space in our "Cheetal" magazine, which we put out every six months, in April and October, to publicise your activities and to serve your members (I am not clear as to whether or not you have yet formed a Society?). We can call it the "Bird Watchers' Corner" or some such thing. We have already a "Young Peoples' Corner" and a "Hindi Section". This way your material would reach a wider public and our magazine, which is devoted to the preservation of Wild Life in general, will get a wider circulation. We already have nearly 400 members, who get the journal free of cost, and also a number of subscribers. In a poor country like India there is scope for amalgamating such activities as ours to the mutual benefit of bird watchers in particular and wild life enthusiasts in general and most of all, to wild life."

P.D. Stracey
Hony. Secretary,
Wild Life Preservation Society of India.

y, 1961.

NEWS LETTER
FOR
BIRD WATCHERS

I am glad to tell you that the first number of our Bulletin for Bird Watchers met with an encouraging response. Extracts from a few letters are reproduced

below for the first News Letter for Bird Watchers. I feel that we must start making members and collecting fees now. Will you please send me application forms as soon as it is decided to do so." - Shivraj Kumar - Jaspur.

Thank you for the News Letter for Bird Watchers. I have read the copy with great interest I am all for such a group. Please let me know if there are any facilities. You are welcome to reproduce in the bulletin, the article 'The Iora mouflage' which appeared in Samachar 59. I shall hunt up and send you a few numbers too in which the Ramblers' notes have appeared. You will, of course, use the blue pencil for the material which is meant for the members of the community." - N. L. Khanolkar - Poona.

I am very interested to read the first number of your News Letter for Bird Watchers enclosing a cheque for Rs 15/- and shall be grateful if you will enrol me as a member." - A. S. Gilani - New Delhi.

Unfortunately, the cheque was not enclosed, otherwise we would not have known what to do with it, as we have not yet opened our subscription list.)

I have seen the first of your ornithological bulletins, and I must say it reaches a very high standard. I shall look forward to seeing future copies. Will you please inform me to pay my subscription to this service?" - Loke Wan Tho - Singapore.

Thanks awfully for your letter of the 6th and for the Bulletins for 'Bird Watchers'. I am afraid that these arrived after most of our keen bird watchers had gone off for the N.C.C. camp. I am however keeping them and will distribute them next term." - M. Gibson - Ajmer.

I am sure the News Letter can be developed into a first rate journal on Ornithology. I shall be glad to give whatever help I can to the News Letter." - Joseph - Dehra Dun.

Birding in India:

The Bombay Natural History Society in collaboration with the Virus Research Centre, and WHO, has been conducting a series of camps for the study of bird borne virus diseases. Birds are caught in mist nets and released after being searched for ectoparasites, with a ring with a serial number and "Inform Bombay Natural History Society" on it. The first two camps, in September 1959 at Bhuj, Kutch, and in March 1960 at Kuar Bet, Kutch, yielded 1751 and 1000 birds respectively. The Kuar Bet figure of 1001 birds included 322 migrants. In September 1960 two camps, one at Jalandar Bet, near Jhinjhuvada, and the other at Hingolghadh, Saurashtra were held. Both these places are in Saurashtra. The Jalandar Bet camp yielded 103 birds of which 336 or 32.45% were migrants, while 1232 birds out of which over 51% were migrants were caught at Hingolghadh. To study the pattern of migration Dr. Salim Ali asked me to continue netting independently on a small scale. Mist Nets were put up on 10/11th and 20/21st October, 1960, and yielded 344 birds, of which 263 were migrants.

Both the amateur bird lover and the serious student, bird netting and ringing have a great educational value. It is also exciting. One never knows what will be caught in a mist net during the migration periods. As the present series of

you for the first News Letter for Bird Watchers. I feel that we start making members and collecting fees now. Will you please send me application forms as soon as it is decided to do so." - Shivraj Kumar - Jasdun.

you for the News Letter for Bird Watchers. I have read the copy with great interest I am all for such a group. Please let me know if there are any activities. You are welcome to reproduce in the bulletin, the article 'The Iora mouflage' which appeared in Samachar 59. I shall hunt up and send you a few numbers too in which the Ramblers' notes have appeared. You will, of course, use the blue pencil for the material which is meant for the members of the community." - N. L. Khanolkar - Poona.

very interested to read the first number of your News Letter for Bird Watchers enclosing a cheque for Rs 15/- and shall be grateful if you will enrol me as member." - A. S. Gilani - New Delhi.

unfortunately, the cheque was not enclosed, otherwise we would not have known what to do with it, as we have not yet opened our subscription list.)

have seen the first of your ornithological bulletins, and I must say it reaches a very high standard. I shall look forward to seeing future copies. Will you please inform me when to pay my subscription to this service?" - Loke Wan Tho - Singapore.

thanks awfully for your letter of the 6th and for the Bulletins for 'Bird Watchers'. I was afraid that these arrived after most of our keen bird watchers had gone off to the N.C.C. camp. I am however keeping them and will distribute them next term." - M. Gibson - Ajmer.

sure the News Letter can be developed into a first rate journal on Ornithology. I shall be glad to give whatever help I can to the News Letter." - Joseph - Dehra Dun.

ringing in India:

Bombay Natural History Society in collaboration with the Virus Research Centre, and WHO, has been conducting a series of camps for the study of bird migration and bird borne virus diseases. Birds are caught in mist nets and released after searched for ectoparasites, with a ring with a serial number and "Inform Bombay Natural History Society" on it. The first two camps, in September 1959 at Alora Kutch, and in March 1960 at Kuar Bet, Kutch, yielded 1751 and 1000 birds respectively. The Kuar Bet figure of 1001 birds included 322 migrants. In September two camps, one at Jalandar Bet, near Jhunjhuvada, and the other at Hingolghadh were held. Both these places are in Saurashtra. The Jalandar Bet camp yielded 103 birds of which 336 or 32.45% were migrants, while 1232 birds out of which over 51% were migrants were caught at Hingolghadh. To study the pattern of migration Dr. Salim Ali asked me to continue netting independently on a small scale. Nets were put up on 10/11th and 20/21st October, 1960, and yielded 344 birds of which 263 were migrants.

Both the amateur bird lover and the serious student, bird netting and ringing are of great educational value. It is also exciting. One never knows what will turn up in a mist net during the migration periods. As the present series of camps is to be continued in 1961, it is to be hoped that more interested people will take advantage of the opportunities offered for learning the technique of bird ringing. In the future a large number of centres can be worked

'Times of India', Bombay, 17th Dec. 1960 - Current Topics:

Bird Migration:

It is a shame, but true, that we have done little in the last ten years to add to the knowledge passed on to us by the British about the migratory birds which enter and leave this country every year. In the days before independence, British Army Officers stationed along the North-Western Frontier enlivened their weary days by trying to trace the routes these birds favoured for their migration; and as a result of these observations, we know that they mainly crossed into India along the north-east and north-west wings of the Himalayan range; but what of the widely held (but unconfirmed) belief that over the higher regions they took a more direct route?

Almost nothing has been done to check the validity of this belief, in spite of the fact that there have been numerous opportunities in the past decade to do so. As a well-known ornithologist pointed out in the course of a talk in Delhi this week, the many expeditions to the Himalayas in recent years could have been used to accumulate valuable data on this and allied questions. But though "consulting ornithologists" have formed part of nearly every expedition, their services have seldom been put to the best possible use. This at least is one omission we can rectify in future.

Extracts:- 'Christian Science Monitor', Nov. 10-1960.

Something New: Airport for the Birds - By Helen Stewart Knaus - Miami Springs, Fla.

According to an old English poem, an owl once went to sea. Today some of its modern cousins in Florida go to an airport, which proves there is something new under the sun.

In Miami, Fla., a wildlife sanctuary is located in the heart of a man-made pandemonium of noise and activity. The inhabitants of the sanctuary are small burrowing owls, and the only way to see them is to get a ticket and get on a plane. As the plane taxis out to a take-off position the owls are clearly visible in grassy areas along the runways.

Unlike many people who complain about the sound of highspeed jets departing from and arriving at busy International Airport, these little feathered home-steaders seem completely disinterested in everything but their own affairs and are happily adjusted to their environment.

Many years ago when the airport was built, the small cave dwellers began nesting, or burrowing, between the runways. With the wisdom of the wild, they appeared to know such a place would provide them with privacy from both animals and people. Also, it is one of the few places left on the coastal ridge of Florida which gives them a place to burrow down six feet at an angle and not strike excessive moisture

The owls feed on rodents, crayfish, and crabs. Nearby canals around the airport overflow the surrounding areas during excessive rains and send the crabs and crayfish scurrying for higher ground, and field mice abound all over this section. The tiny burrowers make a vibrating, motorlike sound during the process of their various activities, and on clear nights residents for a mile or two around the airport are able to hear them clearly.

Several years ago when the colony gained notoriety through a local newspaper story, requests poured in to the port director from bird lovers who were eager to visit the owls. Permission was denied.

The birds have continued to multiply and it is estimated that hundreds make their homes between the runways. Perhaps they feel no need of official protection, but recently the airport was declared a burrowing owl wildlife sanctuary, with the Florida Audubon Society co-operating with the Dade County Port Authority.

Actually, these birds enjoy more privacy and protection than they would have in the wilds of the Kissimmee Prairie where they live in large colonies. The burrowing owl is also native to the islands of Bahama and Guadeloupe, and they are frequently seen on the open plains of North and South America. With its long legs, the owl averages about 10 inches in height. It is brownish in colour, variously barred and spotted with lighter and darker hues.

Airport personnel never interfere with the domestic life of their tenant owls, unless one insists in making a burrow at the edge of a runway. Then the cavity is filled immediately in order to prevent erosion, and the burrower is forced into the open where there is ample room for tunneling.

The manner in which these owls have adapted themselves to man's inventions is similar to the way rabbits live between the runways at Los Angeles Airport. Unlike the owls and rabbits, the gooney birds, or albatross, have never yielded to man at Midway Island.

The International Airport owls are not only wise; they are well-mannered and courteous. They do not overstep the boundaries of their no-man's land between the airstrips; and even in flight, they have never been known to challenge a plane, even in a full-throttle take-off. Perhaps they have their own signals to the tower, such as, "Please clear runway five" or whatever they may wish to use for a quick getaway. At any rate, there are no known casualties among them.

The burrowing owl and the Dade County Port Authority seem to have an unwritten agreement. The port authority controls the runways, and the owls govern the areas in between.

Zafar Futehally,

Juhu Lane, Andheri,

Bombay 58.

The Sunday issue of 'The Times of India', Bombay, recently carried an article on the Paradise Flycatcher. The author lamented the fact that ignoring the provisions of the Bombay Wild Animals and Wild Birds Protection Act 1951, a party of college students had killed a Paradise Flycatcher and none was seen in the locality thereafter for 2 or 3 years. This year again a bird was seen. Nissim Ezekiel has sent us a poem on this entry in the Bird-watcher's Diary.

Paradise Flycatcher

White streamers moving briskly on the green
Casurina, rouse the sleepy watcher
From his dream of rarest birds
To this reality. A grating sound
Is all his language, spelling death
To flies and moths among the leaves
Who go this way to Paradise.
But he, in mask of black, with tints of green,
Is legend come alive to the dreamer
Whose eyes are fixed on him in glad surprise.

So many years ago, his predecessor
Came—it was an afternoon like this—
And clung with shaking streamers
To the same casurina, catching flies:
But Fate that day, and not the dreamer,
Fixed his eyes on him and shot him down.
He lay with red and red upon his white,
Uncommon bird no longer, in the mud.
The live one flashes at the watcher
Chestnut wings: the dead is buried in his mind.

Extracts from letters

"I think it would be a very good thing for India to have an 'Indian Ornithological Society' but the question is whether the time is ripe for it to be launched.

To my mind the difficulty is going to be to provide teachers with some true ornithological knowledge who can inculcate into people's minds the understanding that a bird is a beautiful living creature and not something of no account, smaller and weaker than themselves, and therefore something to be destroyed. It has always seemed to me tragic that most people in India are quite unable to describe colours (a failing in the Indian language system?) and few have any idea of how to describe the points for recognition of a bird.

Would it be possible for some simple form of bulletin, with pictures and very easily-understood aids to recognition, to be made available to schools and universities, with or without the assistance of the Ministry of Education? It would be helpful if that Ministry and the Ministry of Scientific & Cultural Affairs were to take an interest. Unless one can start from the bottom, I cannot see any proper response from the many, particularly amongst the uneducated throughout the length and breadth of the country". - P.H. Sykes, 21 Netaji Subhas Road, Calcutta 1

"Thank you for the second number of the News Letter.

Please note that as soon as you decide to start enrolment I shall send my subscription". - Prof. K.K. Neelakantan, Govt. College, Chittur-Cochin.

"Thank you very much indeed for News Letters Nos.1 & 2 which were received today and thoroughly enjoyed.

Personally, though I am all for the formation of an Indian Ornithological Society, I would strongly suggest that this is the time to consolidate the interest of your subscribers by bringing them together in a sort of unofficial Society and giving them the feeling of 'belonging'. Free lollipops, advice or News Letters are seldom appreciated as they might be and I feel that a nominal subscription of Rs.12/- would help to build up a modest capital". - Commander N.S. Tyabji, I.N. New Delhi

"It was a pleasure to go through this bulletin, and I feel this will go a long way to help and instruct amateur bird watchers like me". - P.K. Rajagoplan, Virus Research Centre Field Station, Sagara (Mysore State)

"In respect of the article 'Bird Ringing in India (No.2), I would be extremely happy if you could send me some instructions in netting and ringing birds, as there are quite a lot of enthusiasts in our group". - Master Ashok Gune, Shri Shivaji Preparatory Military School, Poona

"I have received No.2 of your Bird Watchers bulletin and find it very interesting. I would be grateful if you could kindly send me No.1 of the bulletin and enrol me as a member". - Nilamani Senapati, ICS (Retd.), Bhubaneswar-2, Orissa

"To get this fledgeling to soar, your enthusiasm will have to be matched by us the members, and so I suppose you will welcome small accounts from us from time to time for inclusion in the news letter. I hope you will not find my correspondence too frequent". - K.S. Lavkumar, Rajkot

"I think it is time to form the Society of Ornithologists or Bird-watchers on an All India basis. I believe the annual subscription is too high. It may be kept at Rs.5/- per annum". - Prof. P.V. Bole, St. Xavier's College, Bombay

"The idea of forming an 'Indian Ornithological Society' is welcome, and we fully endorse the objectives. We will extend all our co-operation in the functioning of the Society". - B.R. Seshachar, University of Delhi, Delhi

Paradise Flycatcher in Kanheri National Park

While out with some visiting ornithologists in Kanheri National Park the other day, we were fortunate enough to witness the charming sight of an adult male Paradise Flycatcher - white, with particularly long tail-ribbons - bathing at a forest stream. From a leafy shrub on the bank the bird flew down obliquely to the water for about 10 yards. As soon as he broke the surface, he suddenly spun round with ruffled plumage creating a splash and wetting himself thoroughly. In the same action the bird faced right about and flew back to his perch where he shuffled his feathers and preened himself. He repeated this manoeuvre three times at about 2 minute intervals as if for the special benefit of our visitors who were naturally in ecstasies. Many birds - swallows, bee-eaters, drongos, and others - bathe on the wing in this manner. The deliberate, rapid spin on touching the water to create the spray is an action very distinct from feeding or drinking from the surface as many such birds often do. - Salim Ali, Bombay

BOOK REVIEW:

As many will remember, the Illustrated Weekly of India published, some time last year, a most attractive series of articles on -- "The Birds of a Delhi Garden" by the Rt. Hon. Mr. Malcolm Macdonald, then the British High Commissioner in India, illustrated with some remarkable bird photographs by Mrs. Christina Loke. These articles were chapters from a book I have just received called BIRDS IN MY INDIAN GARDEN (published by Jonathan Cape, London, 1960. Price 45s.). It is a shining example of what can be achieved by sustained enthusiastic spare time bird watching even by a busy diplomat. In and from his New Delhi garden of less than three acres, Mr. Macdonald recorded 136 different species of birds in the 3 years he was there, 30 of which actually bred within its boundaries. On some of these his observations are particularly illuminating. The accounts are well and often amusingly written, and contain numerous shrewd and original observations concerning some of our commonest birds which nevertheless went unrecorded before. The book is embellished by nearly 100 superb and enviable photographs by Mrs. Loke.

SALIM ALI, BOMBAY.

PLANNING FOR ORNITHOLOGY:

A recent meeting of Sub-Committee appointed by the Indian Council of Agricultural Research, New Delhi, to examine the problems of Non-Insect Pests of agriculture and forestry (e.g. birds, flying foxes, squirrels, etc.) came to the conclusion that it was urgently necessary to take up research on the life histories of the various animals incriminated in order to be able to devise proper control measures. The Sub-Committee has recommended the establishment of six regional centres at suitable places spread over the country staffed by one ornithologist, one senior assistant, and two fieldmen with the necessary facilities and equipment. In addition, each centre will have one Fellowship for a Zoology B.Sc. or M.Sc. attached to it. The scheme will be under the direction of a Project Co-ordinator with the required staff stationed in Bombay.

It is expected that, if sanctioned, the scheme will come into operation from 1 April 1962 with the commencement of the Third 5-Year Plan. Thus it will be necessary to recruit the staff by October or November this year. How we are going to find not one but the seven field ornithologists needed is the problem! Ornithology has been so completely neglected by our Universities (with two recent exceptions) that ready-made ones will be hard to come by. But it is gratifying that Government's attention has at long last been drawn to the importance of bird study from the economic point of view, and the scheme opens up opportunities for serious bird watchers and students of ornithology which it is hoped will expand in course of time.

SALIM ALI, BOMBAY.

(Courtesy - 'Scientific American')

Although they are free to fly wherever they please, few birds are cosmopolitan. After 150 million years of evolution in a constantly changing environment, most species are confined to provincial abodes.

When birds took to the air, some 150 million years before the Wright brothers, they had a highway to every possible habitat on the earth's surface. Today they are at home in the polar regions and the tropics, in forest and desert, on mountain and prairie and on the ocean and its islands. Yet when one considers the superb mobility of birds and the eons of time they have had to populate the globe, it is surprising how few cosmopolitan species there are. Some shore and sea birds - sandpipers and plovers, petrels and gulls - are fairly world-wide in distribution. The barn owls, kingfishers, hawks and acrobatic swallows are at home on every continent. Ravens have inherited the earth except, for some obscure reason, South America. But what we mostly see, especially in land birds, is a picture of curiously limited and seemingly haphazard distribution.

Why are the birds of England and Japan more alike, though 7,000 miles apart, than the birds of Africa and Madagascar, separated by a mere 250 miles? Why does South America have more than 400 species of hummingbird and Africa, with quite similar habitats, not a single one? Why have the finches, found on even the most isolated oceanic islands, not found their way to Australia? Why does the North American turkey, Benjamin Franklin's nominee for our national bird, occur nowhere else in the world? How explain the even more circumscribed range of the wirebird plover, unique to the little island of Saint Helena; or the confinement of a species of Ecuadorian hummingbird to the slopes of the volcano Chimborazo at an elevation of 16,000 feet; or the perilous distinction of the 161 remaining Mexican teal that inhabit the tiniest range of all, the shores of a marshy lagoon, one square mile in area, on the tiny Hawaiian island of Laysan?

The main scheme of the world distribution of birds was laid out by Alfred Russel Wallace in his monumental 'Geographic Distribution of Animals', published in 1876. His six great zoogeographic regions today provide a useful way to sort out the distribution of species, as shown in the map on the next two pages. But this still does not explain how the birds came to be distributed as they are. As a Darwinian intensely aware of the dynamic nature of evolution, Wallace could have told us that we must seek our answer in the interplay of two great dynamic agents: the perpetually changing environment and the unending evolution of the birds.

A restless world of heaving earthquakes, wandering shorelines, shifting climate and changing coats of vegetation can scarcely be expected to have sedentary tenants. A species' range is not likely to stand firm before the chilling, grinding advance of a glacier. We dig up the bones of large ostrich-like birds in the U.S.S.R. and the U.S. The fossils around Paris tell us this was once the home of now pan-tropical trogons and parrots. Ancient guano deposits in Peru show how the native pelican shifted from place to place during prehistoric times.

But birds are not mere passive creatures of these forces. The very geological and climatic changes that move and isolate existing species provide the mechanism of natural selection through which new species evolve. The families of modern birds, though established as late as the Miocene, have still had enough time to undergo many profound genetic changes. These in interaction with the changing environment have played their part, too, in distributing species around the globe. The migratory birds that summer in the temperate latitudes and winter in the tropics must have evolved during the comparatively recent millennia in which the world developed its present climatic system. But evolution does not always provide for maintenance and extension of range. The Ascension man-of-war bird, for instance, is a splendid sea-flyer, yet cannot venture far from land. Its oil-producing preen gland has become so small that it cannot alight on the ocean without becoming waterlogged,

Although they are free to fly wherever they please, few birds are cosmopolitan. After 150 million years of evolution in a constantly changing environment, most species are confined to provincial abodes.

When birds took to the air, some 150 million years before the Wright brothers, they had a highway to every possible habitat on the earth's surface. Today they are at home in the polar regions and the tropics, in forest and desert, on mountain and prairie and on the ocean and its islands. Yet when one considers the superb mobility of birds and the eons of time they have had to populate the globe, it is surprising how few cosmopolitan species there are. Some shore and sea birds - sandpipers and plovers, petrels and gulls - are fairly world-wide in distribution. The barn owls, kingfishers, hawks and acrobatic swallows are at home on every continent. Ravens have inherited the earth except, for some obscure reason, South America. But what we mostly see, especially in land birds, is a picture of curiously limited and seemingly haphazard distribution.

Why are the birds of England and Japan more alike, though 7,000 miles apart, than the birds of Africa and Madagascar, separated by a mere 250 miles? Why does South America have more than 400 species of hummingbird and Africa, with quite similar habitats, not a single one? Why have the finches, found on even the most isolated oceanic islands, not found their way to Australia? Why does the North American turkey, Benjamin Franklin's nominee for our national bird, occur nowhere else in the world? How explain the even more circumscribed range of the wirebird plover, unique to the little island of Saint Helena; or the confinement of a species of Ecuadorian hummingbird to the slopes of the volcano Chimborazo at an elevation of 16,000 feet; or the perilous distinction of the 161 remaining Japanese teal that inhabit the tiniest range of all, the shores of a marshy lagoon, one square mile in area, on the tiny Hawaiian island of Laysan?

The main scheme of the world distribution of birds was laid out by Alfred Russel Wallace in his monumental 'Geographic Distribution of Animals', published in 1876. His six great zoogeographic regions today provide a useful way to sort out the distribution of species, as shown in the map on the next two pages. But this still does not explain how the birds came to be distributed as they are. As a Darwinian intensely aware of the dynamic nature of evolution, Wallace could have told us that we must seek our answer in the interplay of two great dynamic agents: the perpetually changing environment and the unending evolution of the birds.

A restless world of heaving earthquakes, wandering shorelines, shifting climate and changing coats of vegetation can scarcely be expected to have sedentary tenants. A species' range is not likely to stand firm before the chilling, grinding advance of a glacier. We dig up the bones of large ostrich-like birds in the U.S.S.R. and the U.S. The fossils around Paris tell us this was once the home of now pan-tropical trogons and parrots. Ancient guano deposits in Peru show how the native pelican shifted from place to place during prehistoric times.

But birds are not mere passive creatures of these forces. The very geological and climatic changes that move and isolate existing species provide the mechanism of natural selection through which new species evolve. The families of modern birds, though established as late as the Miocene, have still had enough time to undergo many profound genetic changes. These in interaction with the changing environment have played their part, too, in distributing species around the globe. The migratory birds that summer in the temperate latitudes and winter in the tropics must have evolved during the comparatively recent millennia in which the world developed its present climatic system. But evolution does not always provide for maintenance and extension of range. The Ascension man-of-war bird, for instance, is a splendid sea-flyer, yet cannot venture far from land. Its oil-producing preen gland has become so small that it cannot alight on the ocean without becoming waterlogged, and it is endangered if caught too far from shore by a heavy rain.

Wallace's map, then, is a single frame from a motion picture, a moment arrested in a long history. To understand how it came about requires the accounting of many factors. Principal among these are the arrangement of the earth's land and sea masses, the circulation systems of the oceans and of the atmosphere, climate, the availability of plant life and the competition of animal life. By considering what each element contributes to the picture alone and in concert with others we can begin to reconstruct the history that lies behind the present geography of birds.

Let us consider first the accidents of geography. It is obvious that land masses are barriers to the spread of sea birds and that the seas are barriers to land birds. This leads straight to the explanation of why South American birds are so different from those of North America: It is because the two continents were so long separated by a sea before the Isthmus of Panama was thrust up. Conversely the fact that many North American birds are closely related to Asiatic species clearly means that their ancestors must have come 'from the old country' when the Bering Strait was a land bridge.

We can see the same processes going on today. As Ernst Mayr of Harvard University has observed, the geologically active regions are also regions of active species-making. The tributaries of the Amazon have cut the forest bordering the river into great 'islands', each of which has isolated its distinct but related species of birds. The geologically recent building of the Andes split apart numerous populations of tropical birds in Colombia and Ecuador. They have evolved into new species, with those on the Pacific side of the range having their nearest relatives across the peaks in the Amazon basin. Just as mountains may isolate species, so mountain passes can provide bridges to join them. The ornithologist Frank Chapman described one pass where the tropical zone reaches nearly up to the saddle. Here we can actually see a large reservoir of species ready to spill over into a new and enlarged range the moment a saddle sinks, or the life zones rise, a few hundred feet.

Once a species surmounts a barrier, it may invade and colonize an enormously larger range with explosive speed, as did the starlings here or the skylarks in New Zealand. About 20 years ago the Old World cattle egret somehow made its way to South America, where it prospered mightily. Now it has reached the United States and is already consolidating its invasion by breeding.

The winds set up by the circulation system of the atmosphere have played the decisive part in distributing some species. For birds as for planes the flight west across the Atlantic in the teeth of the prevailing westerlies is more difficult than the reverse trip. Only five species of wild European land birds have been taken alive in North America; in Great Britain, with but one tenth the coastline, there have been recorded 14 American land species, not to mention 25 aquatic. On the island of South Georgia in the Antarctic are two endemic species, a pipit and a teal, whose nearest relatives live 1,000 miles due west to windward, on the tip of Tierra del Fuego. The islands of the Caribbean are to the leeward of the late summer cyclones of the north equatorial Atlantic; hence they have received as guests from the eastern Atlantic one species each of the tropic bird, frigate bird and booby.

The circulation system of the oceans is important in the distribution of birds not only because it helps or hinders their locomotion but for its effects on climate and food resources. The royal tern, a warm-water species, is bottled up in the Pacific within 30 degrees of latitude, between the cool south-flowing California Current and the chilly north-flowing Peru Current. But in the Atlantic, thanks to the warm Gulf Stream and Brazil Current, its range covers 70 degrees of latitude, from Florida to Argentina. The shoemaker petrel, on the other hand, is tied to cold surface waters and is sandwiched in between the Antarctic pack ice and the Equatorial and Brazil currents. The 12-degree surface-water isotherm marks the northern limit of both the snow petrel and its chief food, the opossum shrimp.

Sea birds in general, unlike land birds, are more abundant in the cooler latitudes because the circumpolar waters are more fertile than the equatorial. Where cool upwelling currents bring nitrates, phosphates and other essential minerals upward into the sunlight, marine plants and consequently fish life abound. Hence the flying multitudes that follow the cold Peru Current, while the warm Sargasso Sea remains a silent watery desert.

The dependence of certain birds on the prevailing ocean currents is dramatically demonstrated on those occasions when nature experiments with the circulation of the oceans. Once about every seven years 'El Nino', the warm equatorial countercurrent off Colombia and Ecuador, swings south, head-on into the Peru Current. In 1925 'El Nino' shifted its course so strongly that it warmed the littoral waters as far south as Arica, Chile, with these catastrophic effects; the Peru Current plankton died; the normal fish population died or fled and was replaced by warm-water species; hundreds of thousands of cormorants, boobies and pelicans perished or succumbed to disease; tropical sea birds moved down the coast, supplanting the sick and dying guano birds.

The distribution of sea birds, as has been indicated, runs counter to the major pattern of land-bird distribution. Some 85 per cent of all living species occur in the tropics, becoming progressively less abundant toward the poles. The major factor in these statistics is undoubtedly climate. Birds have special physiological problems of high body-temperature, rapid breathing and water conservation; all of these, to say nothing of food needs, are more readily solved in a warm, moist climate. This reflects the fact that more of the earth was tropical, humid and perpetually verdant in the Miocene and early Pliocene, when the birds were evolving. So today we find 1,780 species of birds breeding in Ecuador, 195 in New York State, 56 in Greenland and 3 in Antarctica.

The intimate and long-standing relationship between climate and bird distribution is reflected in the contrasting anatomy and physiology of warm- and cold-climate birds. The response of bird evolution to change of environment is so direct and systematic that it can be expressed in a series of biological rules. For example, species of birds living in colder climates will be larger than related species in warmer climates. This rule, which also holds for mammals, clearly results from natural selection in favor of the physiological advantage involved. Birds with larger bodies have relatively less surface through which to lose heat, a large bird being in essence the same as two or three small birds huddled together to keep warm. Birds in colder regions also have relatively shorter beaks, legs and wings from which to radiate body heat. According to another rule, the birds in the cooler part of a species' range will lay more eggs per clutch than those in the warmer. Egg counts by David Lack, the British ornithologist, show the European robin laying an average of 6.2 eggs per clutch in Scandinavia, 4.9 in Spain and 3.5 in the Canary Islands. Despite the short Scandinavian summer, birds can raise large broods of young because of the abundance of insect food and the long daylight hours. For less obviously adaptive reasons, birds and mammals in the tropics have more of the dark pigment melanin than their relatives in cooler climates. Where tropical birds have brighter and more metallic hues, those in the polar regions tend toward white.

The high correlation of range and climate in some species is clearly demonstrated when the climate changes. As is well known, the mean annual temperature of the Northern Hemisphere has been gradually rising during recent decades. It is equally common knowledge that many southern birds, like the cardinal, egret and mockingbird, have been slowly coming northward. In Sweden 50 years ago the hooded crow was a harbinger of spring; today it is a common winter resident. In Finland 262 bird species were known before 1885; now there are 298, the new ones coming mostly from southern Europe and the Mediterranean.

The principle of climatic distribution has been put to practical use in game management. Before a game species is transplanted to a new habitat a climograph, a chart combining temperature and humidity factors, is drawn up for its natural range and compared with that of its proposed home. Where the two match fairly closely, there is at least a chance that the transplant will take hold.

The concentration of bird species in the tropics is correlated with food supply as well as with climate. Since green plants supply the first step in the animal food chain, it follows that the verdure of the tropics offers more of all kinds of sustenance than other regions. Conversely it is clear that insect-eating birds must migrate southward from freezing temperatures when winter comes.

oceans. Once about every seven years 'El Nino', the warm equatorial countercurrent off Colombia and Ecuador, swings south, head-on into the Peru Current. In 1925 'El Nino' shifted its course so strongly that it warmed the littoral waters as far south as Arica, Chile, with these catastrophic effects; the Peru Current plankton died; the normal fish population died or fled and was replaced by warm-water species; hundreds of thousands of cormorants, boobies and pelicans perished or succumbed to disease; tropical sea birds moved down the coast, supplanting the sick and dying guano birds.

The distribution of sea birds, as has been indicated, runs counter to the major pattern of land-bird distribution. Some 85 per cent of all living species occur in the tropics, becoming progressively less abundant toward the poles. The major factor in these statistics is undoubtedly climate. Birds have special physiological problems of high body-temperature, rapid breathing and water conservation; all of these, to say nothing of food needs, are more readily solved in a warm, moist climate. This reflects the fact that more of the earth was tropical, humid and perpetually verdant in the Miocene and early Pliocene, when the birds were evolving. So today we find 1,780 species of birds breeding in Ecuador, 195 in New York State, 56 in Greenland and 3 in Antarctica.

The intimate and long-standing relationship between climate and bird distribution is reflected in the contrasting anatomy and physiology of warm- and cold-climate birds. The response of bird evolution to change of environment is so direct and systematic that it can be expressed in a series of biological rules. For example, species of birds living in colder climates will be larger than related species in warmer climates. This rule, which also holds for mammals, clearly results from natural selection in favor of the physiological advantage involved. Birds with larger bodies have relatively less surface through which to lose heat, a large bird being in essence the same as two or three small birds huddled together to keep warm. Birds in colder regions also have relatively shorter beaks, legs and wings from which to radiate body heat. According to another rule, the birds in the cooler part of a species' range will lay more eggs per clutch than those in the warmer. Egg counts by David Lack, the British ornithologist, show the European robin laying an average of 6.2 eggs per clutch in Scandinavia, 4.9 in Spain and 3.5 in the Canary Islands. Despite the short Scandinavian summer, birds can raise large broods of young because of the abundance of insect food and the long daylight hours. For less obviously adaptive reasons, birds and mammals in the tropics have more of the dark pigment melanin than their relatives in cooler climates. Where tropical birds have brighter and more metallic hues, those in the polar regions tend toward white.

The high correlation of range and climate in some species is clearly demonstrated when the climate changes. As is well known, the mean annual temperature of the Northern Hemisphere has been gradually rising during recent decades. It is equally common knowledge that many southern birds, like the cardinal, egret and mockingbird, have been slowly coming northward. In Sweden 50 years ago the hooded crow was a harbinger of spring; today it is a common winter resident. In Finland 262 bird species were known before 1885; now there are 298, the new ones coming mostly from southern Europe and the Mediterranean.

The principle of climatic distribution has been put to practical use in game management. Before a game species is transplanted to a new habitat a climograph, a chart combining temperature and humidity factors, is drawn up for its natural range and compared with that of its proposed home. Where the two match fairly closely, there is at least a chance that the transplant will take hold.

The concentration of bird species in the tropics is correlated with food supply as well as with climate. Since green plants supply the first step in the animal food chain, it follows that the verdure of the tropics offers more of all kinds of sustenance than other regions. Conversely it is clear that insect-eating birds must migrate southward from freezing temperatures when winter comes.

(To be continued)

ZAFAR FUTEHALLY,
JUHU LANE, ANDHERI,

March, 1961

An unusual nest of the Ashy Wren-warbler (*Prinia socialis*)

We, the avian biology students of M.S. University of Baroda, were searching for the nests of birds in our college garden during monsoon of 1960, and we came across an unusual nest of an Ashy Wren-warbler, which is described here.

The nest was about 3 feet above the ground in an ornamentally trimmed garden hedge of *Duranta plumieri*. Since the hedge was recently trimmed, the leaves on the plants were scanty and the nest, even though it was quite deeply placed, could be seen clearly from the top of the hedge.

From a casual observation, the nest could very well pass off as that of the Red-vented Bulbul, which was also nesting in our gardens during that time. But a closer examination revealed that in comparison to the bulbul's nest, it had a deeper cup with a smaller diameter. Externally, it was plastered with a copious amount of cobweb and the entire structure was firmly supported on a few forked branches. It contained four small oval eggs of a glossy brick-red colour.

This nest resembled the characteristic nest of Ashy Wren-warbler in all respects except that it was supported directly on branches and not placed in a cavity made by stitched-up leaves. A typical nest of this bird is usually found on a broad-leaved plant and the stitched-up broad leaves surround the nest leaving only a small opening. Since the leaves of the *Duranta* are very small, they could not be used in this manner.

We observed both the parents visiting the nest for several days. The eggs hatched, but before the completion of nestling period the entire nest was found to be missing.

Department of Zoology,
Faculty of Science,
M.S. University of Baroda,
Baroda 2

R.M. Ajmeri
A.R.K. Das
M. Sasikumar

Apparently, birds do deviate to a certain extent from their normal nest-building standards, when conditions force them to do so. In 'THE BIRDS OF KUTCH', Salim Ali wrote about the nest of a Tailor Bird which was constructed in an unusual way.

"The normal site is under 3 ft. from the ground. I suspect that in Kutch, owing to the scarcity of suitable large-leaved plants, the Tailor Bird may be obliged to build a different type of nest also - a purse of woven fabrics as its relations the Wren Warblers usually do. I leave this point for other observers to verify!

"Footnote - Since the above went to press, welcome confirmation of this has been provided by an autobiographical note of EHA's dated Dilyar, Sind 28.2.1904. EHA discovered a Tailor Bird's nest at the end of a pendent branch of *Salvadora Oleoides* in open sandhills country. It was woven like the nest of a Fantail Warbler (*Cisticola*) of various kinds of vegetable down, a number of the narrow leaves being sewn to it at the sides as supports. He also found a similar nest in a rose bush at Karachi".

Time of first morning call of the Himalayan Whistling Thrush

The call of the Himalayan Whistling Thrush is one of the most prominent bird sounds of Dehra Dun on winter mornings. Even a casual observer cannot fail to notice that the time of first call of the whistling thrush varies more or less according to the variation in the time of sunrise. While other factors such as weather conditions may also influence the time of first call, it was thought to be of interest to see how close the relationship is between sunrise time and the time of first call.

With the co-operation of other observers, the time of first call of about 50 Whistling Thrushes was recorded whenever conveniently possible during the last 9 winter seasons. The birds under observation occupied territories in an area approximately 175 hectares in extent. Birds occupying the same territory in different winters have been counted as different birds, for this purpose.

The data are being examined with the help of a statistician. But a few tentative conclusions are given below.

During the period of observation i.e. from October to April, the Himalayan Whistling Thrush calls before sunrise.

In autumn and early winter, the time of first call advances with sunrise. But as the sun approaches the winter solstice, the advance in the time of first call does not slow down as much as sunrise does. As a result of this delay in reacting to the approaching winter solstice, the bird continues to call later and later till the middle of January, whereas the sun rises earlier from the fourth week of December.

In the middle of January, when the bird begins to call earlier, the difference between apparent or true sunrise time and the time of first call is only about 18 minutes compared to a difference of about 47 minutes in the first week of November. The difference continues to become less until the beginning of February when it is only about 12 minutes.

From the last week of February, the time of first call gradually recedes with respect to sunrise, but during its stay in Dehra Dun the bird does not make good all the time lost as a result of its delayed reaction to the winter solstice. When the last whistling thrush leaves for the hills in the third week of April, the difference between the time of first call and apparent sunrise stands at about 32 minutes.

Most whistling thrushes call within about 5 minutes of each other. Within this limit it is now possible to predict when the bird will call in Dehra Dun on any morning from October to April. Two habitual late risers were, however, noted who sometimes called as much as 10 minutes later than other birds.

The call time of all whistling thrushes is delayed by completely overcast skies. But the extra illumination available at dawn from the waning moon does not seem to affect the call time of most whistling thrushes.

Joseph George,
Forest Research Institute,
Dehra Dun

N .B. Sunrise refers to apparent or true sunrise time.

Our National Bird

The idea of each country designating a national bird for itself was recommended by the XIIth World conference of the International Council for Bird Preservation held in Tokyo in May 1960. ~~Except~~ Its purpose was to pinpoint public interest and attention to some particular bird-species that stood in the greatest need of protection in each country, especially where it was threatened with extinction owing to public apathy or direct human persecution. By the very nature of its

constitution and functions this was the only aspect of a 'national' bird that could concern the International Council for Bird Preservation, namely to create an intelligent awareness and marshal public opinion for affording nation-wide protection to such a bird. The 'national' bird idea is based upon this consideration alone. It was never intended in the sense of a national emblem, which all countries, including our own, already possess. Neither had it primarily anything to do with whether the bird was particularly ornamental or of mythological, sentimental or similar significance. In this context, I submit that the selection of the Peacock by the Indian Board for Wild Life is totally misconceived and meaningless. It was not at all obligatory for India, as a member of the International Council, to adopt a 'national' bird, but if it is conceded that doing so may further the ends for which the step was recommended, then it is obvious that the Great Indian Bustard is a species that merits this distinction. This bustard is a large and spectacular bird, indigenous to India, whose numbers, in spite of the legislative ban on its killing, are dwindling at an alarming rate due to poaching by vandalistic gunners and also encroachment upon its natural habitats. It needs an urgent nation-wide effort to save the bird from its impending doom.

Salim Ali
Chairman, Indian National Section, I.C.B.P.

* * * * *

A National Bird for China

Attempts are made by various countries from time to time to take a leap forward in agriculture by short cut methods. Many years ago, Dutch farmers exterminated sparrows because they apparently consumed large quantities of grain. But the absence of sparrows gave free reign to the growth of insects of various kinds which did far more damage to the crop than the birds could ever have done. The birds were hurriedly re-introduced, the balance of nature was restored and everyone was happy again.

After this classic instance, one would have thought that governments would place a little less reliance on themselves and a little more on the forces of Nature. But the lesson has still to be learnt. Reviewing the progress of Agriculture in Communist China, the New Statesman of 6th January 1961, in an article entitled 'The Bad Earth' writes: "The ravages of insect pests in 1960 may well have been intensified by the campaign against sparrows in 1959". It would, perhaps, not be out of place to name the humble sparrow as the National Bird of China.

Z.R.F.

A New World Bird Watcher in India

I have neither the knowledge nor the ability to prepare a profound discussion on Indian birds. Brief contact over a period of a couple of weeks can result only in the most superficial of impressions.

However, since these superficial impressions may nonetheless be striking ones, I am encouraged to jot down a few.

Just as an Indian bird watcher coming to the New World is bound to be bewildered by a whole group of new birds in families not even represented in India, the New World warblers (Parulidae) the New World flycatchers (Tyrannidae), ubiquitous Icteridae, the striking tanagers (Thraupidae) and in the tropics, a whole galaxy of families (Formicariidae, Coerebidae, Xenopidae, Scleruridae, Ramphastidae to mention but a few, so the New World newcomer to India halts in his tracks, amazed at novelties. These novelties are among the commonest birds of India, but evoke a real thrill with each one seen, in the newcomer.

First noted possibly are the bulbuls, in every town and park. What a thrill to see the first one, and then on short order to see three or four different species.

The bee-eaters are another group to attract attention. The British ornithologist is already accustomed to these remarkable birds from his continental and Mediterranean forays, but the New World ornithologist stands speechless before these living jewels. The term of living jewels can also be applied to the flowerpeckers, also seen and recognized for the first time.

The New World man has indeed seen members of the starling family, since the European starling was introduced to America in the nineteenth century and is now even a pest in some regions, but the European starling is poor preparation for the striking Rosy Pastor, so common in some parts of India, at least during migration. And the European starling is poor preparation for its relatives the mynahs, birds of never-ending fascination.

While I could go on at greater length, to do so would merely make an enthusiastic note a boring one. So I repeat, it is a real thrill to come to a new country, a different hemisphere, and see bird wonders fly out of the pages of the ornithology books and come to life.

Wilbur G. Downs
Trinidad Regional Virus Laboratory

Study of migration of Rosy Pastors

We have decided to launch a project in which, we hope, all of you who read this bulletin will take part. We want to collect as accurate data as possible about the arrival and departure dates of these birds in India.

It should not be difficult to collect this information for, as you know, the Rosy Pastor is one of the noisiest and the most gregarious of birds. It looks very much like a mynah. It has a black head and wings, and a pale pink body. As breeding time approaches, the pink becomes darker.

These birds start to leave India for their breeding grounds in Central Asia, sometime about March or April. They must now be thinking of departure from many areas where they have been residing for the past few months. If you fail to see these birds on any day, you should make a note about it and check up the position on subsequent days. Ultimately we want to classify the data on the following lines.

Date and place where the birds were first seen, indicating the distance from the nearest town.

Date and place where the birds were last seen.

Notes on the general behaviour of these birds.

Near our house in Andheri, 15 miles north of Bombay City, is an open plot of land in which there are 7 or 8 large Bombax trees. Every year Rosy Pastors come to this area in winter. About twenty birds are regularly seen here drinking nectar from the flowers and quarrelling, with all other birds that come too near to them. The first reference that I find about these birds in my diary this year is on 25th January but it is quite possible that they came here earlier and I missed seeing them.

Z.R.F.

* * * * *

Observations made during a 12 day temporary stay at Bandra are noted below:

On the first of January at about 7-00 a.m. a flock of about 20 Rosy Pastors alighted in a row on vilaithi-imli tree. They started feeding on the ripening pods amidst chirruping protestations and an occasional hovering aerial attack from the House Sparrows. The birds would tug at a pod, pick out a seed, and adjusting it in the beak gulp it down, keeping up a constant che-che-che... chatter while searching for the ripe pods. In the days that followed their numbers increased to about 50. Feeding commenced at about 6.30 a.m. and continued till about 5.45 in the evening, with a slight decrease in the activity between 12 noon and 3.00 p.m.

J.S. Serrao, Bombay

The XIIIth International Ornithological Congress

The XIIIth International Ornithological Congress will be held at Cornell University, Ithaca, New York, from 17 to 21 June 1962, under the presidency of Prof. Ernst Mayr.

All the International Congresses, since the first in 1884, have so far been held only in Europe at 4-year intervals but for disruptions in the two world wars. This will be the first meeting in America.

Persons desirous of attending the Congress should apply to the General Secretary, Prof. C.G. Sibley, Fernow Hall, Cornell University, Ithaca, New York, U.S.A. Although according to the notification applications should have been made up to 1 February 1961, it is possible that some concession may be allowed to late-comers from this part of the World.

Salim Ali

Correspondence

I have received your letter of 27 January and am interested in your project for formation of an Indian Ornithological Society. It will certainly be desirable to have an active group co-ordinating efforts to preserve Indian bird life, and stimulating the interest of the coming generation in birds.

We do not have any publications which would interest your group, unfortunately, but I shall be interested myself in hearing of future progress of your scheme.

Enclosed is a brief note on bird watching in India.

Wilbur G. Downs
Trinidad Regional Virus Laboratory

A brief note to say that I would like to join the proposed Indian Ornithological Society. I have just seen No. 1 Newsletter and hope you will succeed in getting it started. Keep in on a slightly less technical level than the B.N.H.S. and I am sure that you will have plenty of members in due course.

Lt.Gen. Sir Harold Williams
Roorkee

Will members please forward this bulletin to persons who are interested and send me their addresses?

Zafar Futehally

Juhu Lane, Andheri, Bombay-58

(Courtesy - 'Scientific American')

The connection between food supply and range is clearly indicated in cases of adaptation to special diets. Wood-peckers will scarcely seek wood-boring insects on steppes or prairies. Nectar-feeding hummingbirds must have long-season flower resources; some species are bound by the shape of their bills to particular flowering plants. The beaks of crossbills are peculiarly adapted to secure a diet of conifer seeds. The white booby specializes in the catching of flying fish; its breeding islands must accordingly lie in waters where they abound. Such narrow dependency is, of course, an invitation to extinction. When a natural catastrophe all but wiped out the eelgrass along the Atlantic coast of the U.S. in 1931-33, one of the many casualties was the sea brant that fed upon it; the numbers of this goose were reduced by 80 per cent. Such a fate is not likely to overtake the wide-ranging South American kelp gull. Its diet includes fish, marine invertebrates and shellfish, the eggs and young of other birds, carrion, offal - in fact, almost anything.

The ranges of some species are fixed by adaptations to other aspects of their environment that may seem less compelling than food. For nesting sites Scott's oriole in the American Southwest is apparently dependent on the drooping dead leaves of the yucca; the European reed warbler, on beds of fresh-water reeds; the palm swift, on the hanging fronds of the fan palm. The Tristan Island penguins depend upon the indigenous tussock grass to protect them from the elements and predatory gulls, and they reciprocally fertilize it with their droppings. The Bigua cormorant of Tierra del Fuego and the red-footed booby of Little Cayman in the Caribbean present a contrasting picture. They are tree-top nesters: sometimes they nest in such dense colonies that their guano kills the trees, compelling them to move on to new ones.

A force that seems always to promote the expansion of range and the wider dispersal of a species is the competition of other birds of the same species. Overpopulation - or the shortage of food, which is the other side of the same coin - gives a dramatic demonstration of its power in the occasional mass movements of a species known as "invasions" or "irruptions". The snowy owl's repeated southward irruptions into the U.S. are known to coincide with the ebb years in the population cycle of the Canadian lemming. Siberian nutcrackers have invaded Germany 15 times between 1896 and 1933, each time when the pine-seed crop failed at home. Pallas's sand grouse has many times in years of drought burst out of its native steppes northeast of the Caspian Sea and swept in enormous numbers across Europe as far as Britain and Ireland. In the great invasion of 1868 the British Parliament, hoping to naturalize the bird, passed a special act for its protection, but four years later there was not a single grouse to be seen in all England. In these irruptions we see a momentary surmounting of normal barriers through the build-up of dispersal pressure from behind. They provide a mechanism for sampling new ranges, though they rarely succeed in establishing permanent new homes for the species.

Competition within a species promotes the extension of range more commonly through what seems to be an inborn tendency in the young of all species to strike out and explore the world in all directions. Every new generation puts some added strain on the traditional habitat for food, territory and nesting sites, and the younger birds find themselves in unequal competition with the entrenched older ones. The wanderlust of first-year birds is the adaptive device by which natural selection has met this contingency. In Switzerland the banding of young barn owls showed that in years of high nestling productivity 57 to 68 per cent of them dispersed 50 kilometers or more from their natal nests: in years of normal productivity the percentage was only 37. Similar results were found by Alfred Gross in the banding of 23,434 herring gulls on Kent Island in the Canadian province of New Brunswick between 1934 and 1938. Of the 3 per cent recovered at points distant from Kent Island more than half were less than a year old and the great majority of these were captured hundreds of miles from their birthplace.

Seasonal migration is quite a different thing, but it also undoubtedly encourages the extension of range. Long-distance migrants are in a better position to discover new habitats, and they are naturally more tolerant of diversity in the environment. In the mountains of Colombia such winter visitors from North America as the yellow-billed cuckoo, the rose-breasted grosbeak and the yellow, blackburnian and mourning warbler have been observed ranging freely throughout the temperate, sub-tropical and tropical life-zones, whereas the permanent residents are more rigidly confined within zonal boundaries.

Competition between species, in contrast to the dispersal force of intraspecific competition, tends to confine species to narrower ranges. Lack observes that if two species of the same genus have the same diet, they rarely live in the same habitat. Competition between related species thus promotes the concentration of each in a slightly different locality. In this country the black-capped chickadee is without close relatives and ranges widely over forests and marshes. But in Europe this same bird must compete with eight other titmouse species and so breeds only in swampy thickets, leaving all its other possible habitats for relatives to enjoy.

The same sort of mutual accommodation is found even among unrelated species. The amateur naturalist T.E. Musselman tells of a late-spring freeze that killed several thousand bluebird eggs in the nesting-boxes he had set up around Quincy, Ill. The birds laid substitute clutches, but this caused their incubation to coincide with the arrival of the house wrens from the south. In the ensuing competition for nesting sites the wrens destroyed many bluebird eggs. It may have been precisely to avoid such disastrous competition that natural selection had advanced the first nesting of the bluebird, thus permitting both species to occupy the same range.

Sometimes interspecific relations are even more accommodating. In Germany the stock dove depends upon the black woodpecker to furnish it with nest holes. Small, defenseless birds have been known to build their nests in the margins of hawk and eagle nests, thereby securing the protection of their landlords against other predators.

On the other hand, it must be conceded that birds are not always so cooperative with one another. On Muskeget Island, off the coast of Maine, there used to be great colonies of terns. These were supplanted around 1940 by colonies of laughing gulls. Now the laughing gulls are being displaced by the more aggressive herring gulls. In rural areas of the U.S. the aggressive English sparrow has driven the cliff swallow from its former haunts under the eaves of barns and farmhouses.

Predators may close a habitat to a species, especially if they prevent it from breeding. In tropical forests many open-nesting species, like the pigeons, have been virtually eliminated by nest-robbing monkeys. Nesting ducks suffer heavy losses of eggs and young wherever there is an abundance of crows. Such predation may not be an unmixed curse; if the marauding crows did not force the ducks to stagger their egg-laying, their usually synchronized nesting would expose them to wholesale calamity in late-spring freezes.

The biological force that has had the harshest impact and most far-reaching effect on the geography of birds is man. In a few cases his ~~xx~~ cultural interference with the natural environment has encouraged the spread of a species, like the robin, barn swallow or chimney swift. The spread of the barn owl through the state of New York has been attributed to mechanical refrigeration and the resulting abandonment of old icehouses. But in the main man has been a force for restriction and extermination. The classic instruments of his predation have been the ax, the plow, the cow, fire and the gun. To which the modern era has added water pollution, insecticides and herbicides. Cats and rats have been known to depopulate oceanic islands of their birds, completely extinguishing a half-dozen species at a time. That byword for an extinct species, the flightless, ground-nesting dodo, was sent on its way by the pigs introduced onto the islands of Mauritius.

Occasionally civilized man has tried to atone for his ecological misdeeds by importing foreign species. Alas, as with the English sparrow and the starling, only the less desirable species seem to take hold. The worst failures have been his experiments with the bird life of oceanic islands. There used to be about 40 passerine (perching) species on the Hawaiian Islands: more than half have been driven out by the hundred or more foreign species that have been imported there. Mayr says that more kinds of birds have become extinct on the islands of the Pacific than in all the rest of the world put together.

Even without man, of course, the bright tapestry of bird geography will continue to be alternately torn and mended by the wearing and restorative forces of nature. But since man has willy-nilly taken a hand in the process, we must hope he will acquire the wisdom to provide refuge for the most threatened species before they too go the way of the dodo.

A Bird Watching Excursion on the River Aji, Rajkot.

This winter has been a rewarding one for both the small game shikari and the bird-watcher. Migration of duck and other migratory waders has been particularly strong this season.

Around Rajkot, the various irrigation reservoirs and river pools have been interesting bird-watching areas and I have had a most enjoyable set of outings these last two months. It is true I came across nothing I had not seen before, but it was a great thrill to see all the familiar birds again and in great numbers too.

But a very outstanding place for waders was shown to me by one of my schoolboy proteges! This is a stretch of the River Aji down stream of Rajkot, where the narrow water meadows along the banks, have become rich feeding grounds for a great variety of birds on account of the sewage emptied into the water by gutters from the city.

The bright winter sun of Saurashtra and the perpetual winds reduce the offensive smells and the interesting collections of birds amply compensate for the slight inconvenience caused by the unsavoury whiffs. Here a confiding and a rich representation of wading birds feed intermingled, making it an area surpassed for bird study only by the mudflats and salt pans on our coasts. Sitting on natural turf in the pleasantly warm sun, a bird student can train his binoculars on confusingly coloured arrays of Common, Green, Spotted and Marsh Sandpipers, the larger Redshanks, Greenshanks and Ruff and Reeves, and carefully compare their smallest identity marks when on the water and in flight.

A very interesting difference in the ecological needs of the Common Sandpiper to those of the others of the same genus could be noticed in that whereas the former bird was quite plentiful on rocks, or open sand, shingle or mud along stretches of cleaner water, the other sandpipers were equally if not more common in the grass-edged, sewage-sullied water below the confluence of the main sewer. Similarly, the Little Ringed Plover, and the Temminck's Stint seemed to prefer rocks, sand or open mud. The other sandpipers and waders show a greater propensity to wade out into the shallows or even alight on the thickly matted floats of plants growing in deeper water. This latter seems a favourite feeding mode of the Spotted Sandpipers. The Marsh Sandpiper is chiefly a wader foraging in the water rather than along its edges.

It was also interesting to note the total absence of the fish eating River Tern which is a common bird on all the rivers of Saurashtra, while the few migratory Caspian and Gull-billed Terns which did pass over, flew without a downward glance at the sullied water. Pied and Common Kingfishers both fish-eating birds were absent. A similar polarisation in species of Egrets was obvious. Cattle Egrets present in large flocks but the other Egrets were few and far between, and both the Grey and Purple Herons though, present, were uncommon.

Other birds noted on this interesting stretch of river were flocks of Black-winged Stilts, Little Grebes in fair numbers, Garganey and Common Teal and Shovellers. Some Common Snipe, 4 Pheasant-tailed Jacanas and one Glossy Ibis were recorded. Black Ibis were plentiful, Wagtails of all migratory forms flitted after insects and two Pintail Drakes, one Painted Stork, some flighting Reef herons, a Short-toed Eagle hovering high over head, a female marsh Harrier, a couple of female Pale Harriers, one Black-winged Kite and Common Swallows were also observed. Several large flocks of Little Cormorants went winging up river at dusk, but only

A Bird Watching Excursion on the River Aji, Rajkot.

This winter has been a rewarding one for both the small game shikari and the bird-watcher. Migration of duck and other migratory waders has been particularly strong this season.

Around Rajkot, the various irrigation reservoirs and river pools have been interesting bird-watching areas and I have had a most enjoyable set of outings these last two months. It is true I came across nothing I had not seen before, but it was a great thrill to see all the familiar birds again and in great numbers too.

But a very outstanding place for waders was shown to me by one of my schoolboy proteges! This is a stretch of the River Aji down stream of Rajkot, where the narrow water meadows along the banks, have become rich feeding grounds for a great variety of birds on account of the sewage emptied into the water by gutters from the city.

The bright winter sun of Saurashtra and the perpetual winds reduce the offensive smells and the interesting collections of birds amply compensate for the slight inconvenience caused by the unsavoury whiffs. Here a confiding and a rich representation of wading birds feed intermingled, making it an area surpassed for bird study only by the mudflats and salt pans on our coasts. Sitting on natural turf in the pleasantly warm sun, a bird student can train his binoculars on confusingly coloured arrays of Common, Green, Spotted and Marsh Sandpipers, the larger Redshanks, Greenshanks and Ruff and Reeves, and carefully compare their smallest identity marks when on the water and in flight.

A very interesting difference in the ecological needs of the Common Sandpiper to those of the others of the same genus could be noticed in that whereas the former bird was quite plentiful on rocks, or open sand, shingle or mud along stretches of cleaner water, the other sandpipers were equally if not more common in the grass-edged, sewage-sullied water below the confluence of the main sewer. Similarly, the Little Ringed Plover, and the Temminck's Stint seemed to prefer rocks, sand or open mud. The other sandpipers and waders show a greater propensity to wade out into the shallows or even alight on the thickly matted floats of plants growing in deeper water. This latter seems a favourite feeding mode of the Spotted Sandpipers. The Marsh Sandpiper is chiefly a wader foraging in the water rather than along its edges.

It was also interesting to note the total absence of the fish eating River Tern which is a common bird on all the rivers of Saurashtra, while the few migratory Caspian and Gull-billed Terns which did pass over, flew without a downward glance at the sullied water. Pied and Common Kingfishers both fish-eating birds were absent. A similar polarisation in species of Egrets was obvious. Cattle Egrets present in large flocks but the other Egrets were few and far between, and both the Grey and Purple Herons though, present, were uncommon.

Other birds noted on this interesting stretch of river were flocks of Black-winged Stilts, Little Grebes in fair numbers, Garganey and Common Teal and Shovellers. Some Common Snipe, 4 Pheasant-tailed Jacanas and one Glossy Ibis were recorded. Black Ibis were plentiful, Wagtails of all migratory forms flitted after insects and two Pintail Drakes, one Painted Stork, some flighting Reef Herons, a Short-toed Eagle hovering high over head, a female marsh Harrier, a couple of female Pale Harriers, one Black-winged Kite and Common Swallows were also observed. Several large flocks of Little Cormorants went winging up river at dusk, but only one was seen on the water. A few White Ibis mingled with the Cattle Egrets probing in the wet mud and vegetation.

plentiful elsewhere this winter.

K.S.Lavkumar
Rajkumar College, Rajkot.

Data about Rosy Pastors.

Reference the co-operative scheme for collecting accurate data about the status and migratory movements of the Rosy Pastor in its winter quarters (NL 4, March '61) and K.S.Lavkumar's good note on the bird in central Saurashtra (NL 5, April '61), I recently came across three enormous roosts which on account of the vast numbers of birds at each, are worth recording. Correlated with the dates and periods of occupation, such large roosts could be suggestive of the pattern of movement of the birds in different localities, especially prior to emigration.

KUTCH: Roost observed between 11 and 26 March. Occupation continuing. Large flocks and small parties arriving at sunset in swift-flying formations from all directions at the nightly roost within a dense reed-bed in a seepage nullah below the Pragsar dam at Chaduva. Birds almost completely absent from the neighbourhood during saytime, therefore could easily have been recorded as such. They were observed to disperse about 15 minutes before sunrise each morning, or about 15 minutes after the vast concourse of House Crows from an adjoining communal roost had left. Number of Pastors estimated at 2000.

GUJARAT: Roost observed 31 March. Period of occupation unknown, but continuing. Enormous swarms flying in from all directions at sunset to roost in the large leafy trees around the main railway station in the heart of Baroda City. This is a noisy, thickly populated locality with trains, motorbuses and lorries, cars and tongas continuously moving up and down, and the streets crowded with cyclists, pedestrians, rickshaws and hawkers. Bright electric lights burning all right. The dense swarms, when settled on the tree-tops, concealed all the leafless branches completely as by a thick black padding. My note says "Reminiscent of the flies on jalebi I recently saw in a sweetmeat stall in Mandvi Bazaar (Kutch)". As it grew darker the parties and flocks gradually descended to settle for the night in the foliage canopy of the Polyalthia and other densely leaved trees. The number of birds here was roughly estimated at 10,000, but they could easily be twice that figure. These enormous congregations give some indication of the damage-potential of the Rosy Pastor to bajri and jowar crops which they raid all day long in the surrounding country.

DELHI: Roost observed 14 and 15 April. Occupation continuing. Swarms concentrating at sunset to roost in a grove of rather scattered but large and dense thickets of Salvadora persica at Raisina, near the transmitting station of All-India Radio. The birds were reported to have arrived here only within the last 10 days. All now in perfect summer plumage and evidently on passage to their northern breeding grounds. Party after party of 10 to 50 birds, and dense well-drilled formations of 500 arriving from all directions, flying at great speed close above the ground, sweeping up suddenly from time to time as if to clear some imaginary obstacle ("hedge-hopping"), wheeling, banking, and circling in the air before alighting on bare trees and Salvadora bushes in packed, typically starling-like clusters, and overflowing on to the ground. Numbers difficult to estimate; may be 25,000 or 50,000 birds, or more! Were reported on the evening of 15 April to have decreased noticeably.

At the end of his note in Newsletter 5, K.S.Lavkumar says "I was struck by the possibilities of successful banding if some effective method could be evolved to trap the sleeping flocks". The conditional "if" is important, for the Pastor is indeed uncanny in his capacity to avoid danger, and no ordinary netting methods will do for him. Our recent disappointing experience in Kutch, and then again in Delhi, with long stretches of mist nets strategically deployed, as we thought, and after much careful preli-

preliminary staff work, to scoop up the masses as they flew in to roost, ended with one solitary Pastor blundering into the nets on either occasion!

The Rosy Pastor is a very suitable subject for intensive ringing and migration study. It is a common and abundant species, and widely distributed in winter throughout peninsular India. It is good eating and largely shot and netted for food over its entire range, which increases the chances of ring recoveries and a rapid accumulation of data concerning its migration routes and local wanderings. The birds, moreover, are frequently infested with ticks and thus of special importance from the viewpoint of the current BNHS/WHO investigation of the role of migratory birds in the dissemination of arthropod-borne viruses.

Reader of the Newsletter will be doing a valuable service to bird study in India by passing on to us records of any large roosts of Rosy Pastors (also of swallows and wagtails) located in their areas, and by exploring the possibilities of catching the birds for ringing in large numbers with the help of hired professional trappers.

Salim Ali

National Bird.

Much public interest has been aroused, and continues, on the question of the selection of a National Bird for India. In an earlier Newsletter, I explained the genesis of the recommendation made to National Sections by XII world conference of the International Council for Bird Preservation in Tokyo last year. The basic objective of the idea was to focus interest and solicitude on a particular species of bird in each country that stood in need of co-operative protection from the public to save it from extinction. I pointed out that in this context the Great Indian Bustard was our strongest claimant to the distinction.

In letters published in the newspapers, and in private correspondence and interviews with me since, it has been argued that if this was indeed the implication of "National Bird" then the selection of the Robin in England seemed a contradiction. To this the answer is simple. In England they have no bird which is exclusively English or British. All their birds are common to the continent of Europe as well. Neither is there any species in that country at the present time which is in real danger of extinction. Therefore in England they were at liberty to choose their National Bird on other considerations, without regard to the fundamental issue. That they have chosen the Robin is because of the traditional sentiment Britishers have always attached to this friendly and attractive little bird. Their case, I submit, is not comparable with ours, nor the Robin's with that of the Great Indian Bustard.

Salim Ali

XIII International Ornithological Congress.

The Thirteenth International Ornithological Congress will convene at Cornell University, Ithaca, New York, from June 17 to 24, 1962.

The official announcement and application for membership in the Congress are now ready for distribution. Interested persons who have not already done so should send their names and addresses to the Secretary General as soon as possible.

A small fund has been obtained to provide partial support for the travel of a few persons coming from outside North America. Application forms will be sent to persons requesting them. (Citizens of the United States and Canada are not eligible.)

All applications for membership, travel grants and places on the program should be returned to the Secretary General before December 1, 1961.

Charles G. Sibley, Secretary General
Fernow Hall, Cornell University
Ithaca, New York, U.S.A.

REVIEWS:

Birds of Gujarat.

Yuvraj Shri Shivraj Kumar of Jasdan has written a useful note on birds covering the whole of Gujarat. This was printed in the Souvenir published by the Indian National Congress at the time of the Bhavnagar Session. He has listed the birds which are found in the moist forests of the Dangs, those which are found in the dry plains, and those which are found along the extensive mud flats of the Gulfs of Kutch and Cambay. He has referred to the Seasonal Visitors like the Pied Crested Cuckoo, the Florican and Rain Quail, and the hosts of true migrants or winter birds which spread over Gujarat from September to April. This article contains many interesting tit bits about the habits of birds, and is not just a dry list of the species in different areas and of different status. For instance, referring to the Brahminy Duck he writes: "The beautiful Brahminy Duck chiefly breeds in Tibet. It is of interest to note that over there this bird was once quite tame and fearless of man while it was breeding in the summer, while in its winter haunts in India it is very wary. Alas with the recent changes in Tibet one wonders about the fate of this duck and many other species of birds, and no doubt there will be a reduction in their numbers with the changes taking place in Central Asia".

Those who want to get a good general idea of the birds of Gujarat should go through this note. I am sure Shivraj Kumar will be happy to send it on to anyone interested.

Z.R.F.

The Ring.

The Ring:

The Ring is a quarterly private magazine, which was started by Dr. W. Ryzewski in October, 1954 in London. With the issue of November, 1960 it has completed 25 numbers, and henceforth it will be published from Poland. The editor can rightly feel proud of his achievement. The Ring has never been subsidised by any organisation, and its success is due entirely to the competence of its editor and the co-operation and assistance which he has received from friends in various countries.

I have before me the four numbers of Ring Nos. 22 - 25 published in 1960. As can be judged from the name of this magazine its main interest is in the problem of bird banding. The ringing work carried out in various countries is systematically described in every issue and now that a modest beginning has been made in India to ring birds serious ornithologists in this country should find this publication very useful. As readers will know banding is the only way in which individual birds can be identified. The identification of individual birds through their "number plates" makes it possible to study the migration routes, and the life histories of different species.

The banding of birds is by no means an easy affair. To get the bird from the bush into your hand for purposes of banding requires a great deal of organised work. Birds have also got to be very carefully handled, for they get damaged very easily. In the February, 1960 issue of Ring, the Editor initiates a discussion on an old problem about whether putting a ring round the leg of a bird harms it in any way. Apparently there is still a feeling prevalent among

some field observers that the ring disturbs the bird, and occasionally leads to its premature death. There is also the objection put forward that since recoveries of banded birds are so small, both because of the great mortality among juveniles and because of the fact that professional bird trappers never report catches, the method has little practical value. It is, therefore, recommended by some that mass banding of birds should be abandoned and only a few birds for detailed study should be ringed. In subsequent issues of the Ring, the advantages of mass banding have been conclusively shown, and it also seems quite certain that if the proper size of ring is used and it is carefully pressed into position so that no rough edges are left, the bird suffers no damage or discomfort at all. In any case, we in India will look forward keenly to the reports of recoveries published in the Ring, to see if any of the 2,000 odd birds ringed in the Rann of Kutch and Saurashtra by Dr. Salim Ali and party have been recovered safely in their breeding grounds.

Z.R.F.

CORRESPONDENCE:

"Thank you very much for sending me No. 3 of your News Letter for Bird Watchers. I took the liberty of reviewing it in the next issue of THE RING and would be most grateful if you could send us Nos. 1 & 2 of your News Letter. We are most interested in this kind of publication and are anxious to have complete files of them.

I will be glad to send you THE RING on exchange basis. Permission is granted to reprint material published in THE RING provided that credit is given to the bulletin.

Please note our new address in Poland. I would be obliged if you could review THE RING in your News Letter encouraging your members to subscribe to it. Orders should be addressed to me - the subscription fee which will be only 10 shillings per year could be paid locally in India. Exact information will be furnished later on."

Dr. W. Rydzewski.
Editor "THE RING", Laboratory of
Ornithology,
Sienkiewicza 21,
Wroclaw, POLAND.

"It is a welcome news to me to know that you with Dr. Salim Ali and other friends intend to form an Indian Ornithological Society. As a person interested in bird watching I very much like the idea....."

Lalsinh M. Raol.
Lalit Nivas,
13, Jagnath Plot, RAJKOT.

"Thank you very much indeed for sending me the last few issues of your "Bird Notes". I and my husband find them very interesting and should like to continue receiving them. We shall be glad to pay a subscription.
....."

(Mrs.) Rhona Ghatge,
7, The Shelter,
'A' Road, Churchgate, BOMBAY 1.

"I was posted in Cochin from December '57 to April '60 and give here a list of birds which I observed within the area of the Naval Base on Willingdon Island situated between Ernakulam and Fort Cochin. The Naval base consists of a large open airfield area, a Canal running through it and a built-up area consisting of domestic & technical buildings with large flowering trees and shrubs. The harbour area and backwaters have been excluded.

- | | |
|-----------------------------|-------------------------------|
| 1. Pariah Kite | 23. Blue rock Pigeon |
| 2. Brahminy Kite | 24. Little Green Bittern |
| 3. Spotted Owl | 25. Snake Bird |
| 4. Cattle Egret | 26. Curlew |
| 5. Red Wattled Lapwing | 27. Paddy Bird |
| 6. Yellow Wattled Lapwing | 28. Common Sandpiper |
| 7. Little Ringed Plover | 29. Golden Oriole |
| 8. Small Indian Skylark | 30. Purple rumped Sunbird |
| 9. Indian Pipit | 31. White Breasted Kingfisher |
| 10. Large Pied Wagtail | 32. Common Indian Kingfisher |
| 11. White Wagtail | 33. Koel |
| 12. Black Drongo | 34. Magpie Robin |
| 13. Steaked Fantail Warbler | 35. Tickell's Flower pecker |
| 14. Ashy Wren Warbler | 36. Roseringed Parakeet |
| 15. Tailor Bird | 37. Common Green Bee eater |
| 16. Shikra | 38. Large Green Bee eater |
| 17. Red Rumped Swallow | 39. House Crow |
| 18. Palm Swift | 40. Jungle Crow |
| 19. Baybacked Shrike | 41. Common Myna |
| 20. Rufousbacked Shrike | 42. House Sparrow |
| 21. Common Wood Shrike | |
| 22. Blue Jay | |

I was not particularly successful in drawing up a comprehensive list of birds in the Mattancherry, Fort Cochin and Ernakulam areas and it would be of interest to compare such a list with the one given above if some enthusiast(s) in these areas could make one available. Any takers?"

N.S. Tyabji
Naval Headquarters,
NEW DELHI.

"We sincerely hope that your efforts to form an Ornithological Society will soon bear fruit. Please note that we shall be only too glad to join the same."

M.A. Rashid
Hony. Secretary,
Wild Life Club,
DEHRA DUN.

"What I had in mind is that you should take some space in our "Cheetal" magazine, which we put out every six months, in April and October, to publicise your activities and to serve your members (I am not clear as to whether or not you have yet formed a Society?). We can call it the "Bird Watchers' Corner" or some such thing. We have already a "Young Peoples' Corner" and a "Hindi Section". This way your material would reach a wider public and our magazine, which is devoted to the preservation of Wild Life in general, will get a wider circulation. We already have nearly 400 members, who get the journal free of cost, and also a number of subscribers. In a poor country like India there is scope for amalgamating such activities as ours to the mutual benefit of bird watchers in particular and wild life enthusiasts in general and most of all, to wild life."

P.D. Stracey

June, 1961

Bird Migration Study in India.

Our knowledge of bird migration in India is very elementary, based largely on conjecture and disconnected observations, mostly of British officers who happened to be stationed in favourable localities on the NW. Frontier during the last 150 years.

Organized bird ringing and the study of migration began here for the first time about two years ago. The opportunity to do so came as an unexpected windfall. The discovery that the virus of the Kyasanur Forest Disease of Mysore was a member of a group of viruses whose known focus was in parts of the U.S.S.R., suggested that its presence in India may have something to do with the migratory birds coming from that area. Thus the W.H.O. became interested in investigating the problem, and made a monetary grant to the Bombay Natural History Society for conducting the necessary field work. The Virus Research Centre in Poona, maintained jointly by the Indian Council of Medical Research and the Rockefeller Foundation, which is directly interested in the KFD problem, was expected to co-operate in the project from the virological angle.

The first field session, held in Kutch in autumn of 1959, was more in the nature of a training camp. Dr. A. Schifferli, Director of the Swiss Bird Migration Centre at Sempach, was invited to come over from Switzerland to train local personnel in the use of Japanese mist nets and in the techniques employed in modern bird migration study. The VRC, Poona, deputed some of their technicians to work with the BNHS field party in order to collect ticks and other relevant data from the netted birds. Participating in the initial work were Dr. Salim Ali, the Chief Investigator of the Project, and three members of the BNHS staff, together with a number of voluntary helpers invited specially to take advantage of the training available, in the hope that later they would help to spread the work further afield under the aegis of the Society.

Since the session of September 1959 there have been three more field sessions in Kutch and Saurashtra, of 3 or 4 weeks' duration each - in March 1960, September 1960 and March 1961. In these four sessions over 7500 birds were caught and ringed, of which about 20% were migrant, the rest resident. From the viewpoint of the study of bird movements the ringing of even the so-called 'resident' birds is not without importance. Many resident birds are subject to seasonal movements involving hundreds of miles within the country, about which we know practically nothing. The ringing of these birds on a large scale should provide useful data concerning their local migrations, as well as about other facets of their biology which cannot be studied without individual recognition of the birds. The catches, moreover, provided the VRC investigators with opportunities of examining large samples of resident birds, in addition to the migrants, and of obtaining useful data on tick infestation and the problem of dissemination of arthropod-borne viruses through bird agency.

While the facilities are available it is proposed to continue and expand this work. To a certain extent the expansion must depend on the amount of voluntary amateur help that is forthcoming. The camps will continue to take place twice a year during the spring and autumn migrations. This will be between about 1 March and 15 April in the former case, and between 1 September and 15 October in the latter.

Correspondence from university teachers and students of zoology, and others, with a view to participating in the field camps and availing themselves of the opportunity of learning the various techniques and thus furthering this activity will be welcomed by the Chief investigator, BNHS Bird Migration Field Project, whose address is : c/o The Bombay Natural History Society, 91 Walkeshwar Road, Bombay 6.

In this connection it is proposed, further, to employ professional bird catchers in order to ring large numbers of certain prominent migratory species which are commonly hunted or netted all along their routes, both within the country and beyond our frontiers. For the present attention is proposed to be concentrated on the Rosy Pastor, the Common or Grey Quail, and wild ducks of all species. Information from readers about localities where the netting of these birds in bulk can be most profitably undertaken, and about the availability of professional netters, their terms, etc. will be greatly appreciated.

Salim Ali.

A Swallow Roost Near Rajkot.

On the 16th of April, I came across a very large roost of swallows. We had gone out for an evening drive to the Aji Lake a mile to the south of the municipal limits. Here great flocks of Common Swallows, Wiretailed Swallows and Sand Martins were hawking insects along the masonry dam. A strong westerly wind was blowing onto the dam providing the birds with strong updrafts for their aerial acrobatics. Still others were perched on electric wires and on stones and rock outcrops of a hill at the north end of the dam. As the sun set, batches of birds detached themselves and flew to the lee of the dam over the water, where after preliminary twitterings and flutterings, they settled down for the night on masonry outcrops. About 15 minutes after sunset, all the birds were ensconced for the night, well protected from the strong wind by the bulk of the dam, and from likely predators by the water below. There must have been more than a couple of thousand birds, and from the amount of bird droppings on the ledges, this roost must have been occupation for a considerable time. I had missed it by looking for one in more conventional places like the thick reed-beds in the Lalpari River east of Rajkot.

We tried using mist nets in what appeared a truly ingenious manner, but caught only 6 birds and even those almost got away! It was all very disappointing, but we did learn the limitations of mist nets in trapping birds. The swallows are close roosters and do not fly off easily - they have to be almost shoved off their niches! We hope, therefore, to try out a modified Butterfly Net Trap in scooping the sleeping birds up for ringing. However, it is now too late in the season to try, as most of the birds have left. On the 22nd only a quarter of the congregation was left; on the 3rd of May only a meagre hundred birds were left.

An interesting fact noted was that on the 22nd the majority of the birds were Wiretailed Swallows, and these had departed with the other truly migratory species. Could these birds have been of a migratory race?

I await the next season with anticipation and with my 'Butterfly Nets'. I am sure they will work, but then I should not count my chickens before they have hatched.

K.S. Lavkumar,
Rajkumar College, Rajkot.

NOTES AND COMMENTS

Hindi and English Names of Bird:

It has always been difficult to pin down, with accuracy, the Hindi or regional language names of different birds. Often the same name is used for different birds in different localities, sometimes even in the same locality. Sometimes one species has several names. It is now felt that the time has come when Indian language names must be standardized. We quote below a passage from the preface of the new edition of Salim Ali's Book of Indian Birds.

"It seems obvious if bird study is to prosper and develop in India that simple Hindi names should be standardized - if necessary coined or borrowed from other languages - and put into circulation as early as possible under the imprint of some competent and recognized central institution."

We would like to ask all those who read this newsletter to help to standardize these names by sending lists of the names of the commoner birds of their region (of those species, for instance, which are described in the Book of Indian Birds) in Hindi or the regional language. It need not be stressed that in this case the accuracy and reliability of their information is of the utmost importance. Please check and counter check the identification of the bird as well as the general currency of the names before sending them to us. Inaccurate information will hinder rather than help our work.

As far as the use of English bird names is concerned, we must follow the convention of orthography followed and recommended by the Bombay Natural History Society.

- (1) When the name is a compound of two bird names, capitalize both with hyphen between thus:

Crow-Pheasant	Tit-Babbler
Bustard-Quail	Cuckoo-Dove
Pheasant-Grouse	Sparrow-Hawk
Peacock-Pheasant	Curlew-Sandpiper
Flycatcher-Warbler	Spoonbill-Sandpiper
Hawk-Eagle	Buzzard-Eagle

- (2) When first half of name is descriptive of bird or its habits or habitat, capitalize both without hyphen thus:

Bush Quail	Fishing Eagle
Ground Dove	Fish Owl
Rock Sparrow	House Crow
Leaf Warbler	Scavenger Vulture
Tiger Bittern	

- (3) Except where convention is established otherwise, thus

Junglefowl	Oystercatcher	Paddybird
Spurfowl	Woodcock	Opendbill
Sandgrouse	Sandpiper	Spotbill
Peafowl	Tropic-bird	Redshank
Waterhen	Spiderhunter	Greenshank
Moorhen	Flowerpecker	

The important place that birds occupy in our national economy is just beginning to be realized governmentally. In News Letter No. 3 of February, mention was made of a scheme drawn up by a special sub-committee appointed by the Indian Council of Agricultural Research (ICAR) to investigate the problem of damage to crops and orchards by pests other than insects, especially birds and small mammals. This scheme has since

It has always been difficult to pin down, with accuracy, the Hindi or regional language names of different birds. Often the same name is used for different birds in different localities, sometimes even in the same locality. Sometimes one species has several names. It is now felt that the time has come when Indian language names must be standardized. We quote below a passage from the preface of the new edition of Salim Ali's Book of Indian Birds.

"It seems obvious if bird study is to prosper and develop in India that simple Hindi names should be standardized - if necessary coined or borrowed from other languages - and put into circulation as early as possible under the imprint of some competent and recognized central institution."

We would like to ask all those who read this newsletter to help to standardize these names by sending lists of the names of the commoner birds of their region (of those species, for instance, which are described in the Book of Indian Birds) in Hindi or the regional language. It need not be stressed that in this case the accuracy and reliability of their information is of the utmost importance. Please check and counter check the identification of the bird as well as the general currency of the names before sending them to us. Inaccurate information will hinder rather than help our work.

As far as the use of English bird names is concerned, we must follow the convention of orthography followed and recommended by the Bombay Natural History Society.

- (1) When the name is a compound of two bird names, capitalize both with hyphen between thus:

Crow-Pheasant	Tit-Babbler
Bustard-Quail	Cuckoo-Dove
Pheasant-Grouse	Sparrow-Hawk
Peacock-Pheasant	Curlew-Sandpiper
Flycatcher-Warbler	Spoonbill-Sandpiper
Hawk-Eagle	Buzzard-Eagle

- (2) When first half of name is descriptive of bird or its habits or habitat, capitalize both without hyphen thus:

Bush Quail	Fishing Eagle
Ground Dove	Fish Owl
Rock Sparrow	House Crow
Leaf Warbler	Scavenger Vulture

Tiger Bittern

- (3) Except where convention is established otherwise, thus

Junglefowl	Oystercatcher	Paddybird
Spurfowl	Woodcock	Opendbill
Sandgrouse	Sandpiper	Spotbill
Peafowl	Tropic-bird	Redshank
Waterhen	Spiderhunter	Greenshank
Moorhen	Flowerpecker	

The important place that birds occupy in our national economy is just beginning to be realized governmentally. In News Letter No. 3 of February, mention was made of a scheme drawn up by a special sub-committee appointed by the Indian Council of Agricultural Research (ICAR) to investigate the problem of damage to crops and orchards by pests other than insects, especially birds and small mammals. This scheme has since received official approval and is expected to come into operation from 1st April 1962.

Mention must here be made of another research project which was submitted by Dr. Salim Ali to the Council for Scientific and Industrial Research (CSIR) in April 1960 which has also been approved but for launching which funds may take some time in becoming available. This project, entitled "The Role of Birds in our National Economy" aims at investigating the impact of birds on human activities in general, apart from the crop pest aspect. One of the problems for investigation, for example, will be a detailed statistical assessment of the part that birds play in the fertilization of flowers and the dissemination of seeds, and in the overall control of vegetation. This is a truly 'biological' field investigation in the sense that it lies as much within the province of a zoologist as of a botanist. If the zoologist possesses special competence in field ornithology, so much the better.

It is envisaged to provide two post-graduate fellowships, one for a biology student with zoology as his principal subject and botany as subsidiary, and the other the other way round. The scheme holds promise of yielding much original data on the ecological aspects of birds in relation to human ecology.

Salim Ali

Sunbirds 'flycatching'.

While I was looking out of my window at Baroda, I saw a sunbird (Nectarinia-asiatica) repeatedly rising off the branch of a tree and returning to it again and again. This made me think that the sunbird must be trying to catch insects. After my return to Bombay, I described what I had seen to Dr. Salim Ali. He said that these birds were known to take tiny spiders suspended from their gossamer threads but that he himself had never seen the flycatching action I had described.

On the 8th of March 1961, Dr. Salim Ali, Mr. Rathod, the D.F.O. and I were out in the Nadibagh Forest Reserve near Bhuj. We saw about 30 or 40 sunbirds, more or less together, almost as a flock. Among them there were only five females, all the rest being males in the eclipse plumage. All the birds were behaving in the same way as I had seen the sunbird behave in Baroda. They kept to the Prosopis juliflora bushes which grew on the edge of the stream and so we could only see the birds from across the water. Sometimes they flew in hovering zigzags out over the water 20 to 60 feet away from the plants and back again, but because of the angle of the sun, we could not actually see what they were after. When we went up a little closer, we found that as we were now looking against the dark background of bushes on the opposite bank with sunlight directly behind, the small flying insects were clearly visible over the water.

P.W. Soman
Bombay.

Death of a Minivet.

A few days ago a friend showed me a male short-billed minivet which was dead. The bird was found hanging from a V-shaped twig on a bush, the two limbs of the V holding the bird by the neck. It would appear that the bird somehow got caught in the V and, not being able to extricate itself, died of exhaustion.

Once I saw a common myna which was similarly trapped between the stile and partly open shutter of an arched door. The bird was struggling violently and other mynas were crying and flying about excitedly. Fortunately I could rescue the bird before it was too late.

Joseph George.

Nesting of a Dove.

A hen dove nested in a hanging pot plant in the south-east verandah of my house on the 14th April and laid an egg. Since it became difficult for me to water the plant, I removed the nest along with the egg to a window sun-shade very close to the flower pot. The dove refused to sit in the nest and even when I placed the flower pot close to the nest on the sun-shade itself she was not attracted. I then made the nest more comfortable by padding it up with some more dry grass. To my pleasure, I found that it attracted the dove next day and a couple of days later I found that there were two eggs in the nest instead of one. Thereafter I removed the flower pot and placed it back in its original position and the dove kept on sitting on the eggs without any further trouble.

Dinesh Mohan
Central Building Research
Institute, Roorkie (U.P.)

Small Indian Skylark.

The airfield area on Willingdon Island, Cochin, which consists of large expanses of grass and low bushes contains a large population of the Small Indian Skylark, Indian Pipit, Little Ringed Plover and the Redwattled and Yellow-wattled Lapwings.

It was a delight to watch the skylarks rising vertically into the air and filling the open spaces with their ecstatic song at practically all hours of the day. However, I would like to record one little fact about these birds which interested me considerably. In the airfield area which is mostly re-claimed land, morram has been used as a surface binder and I noticed that the skylarks were in the habit of making shallow excavations in the morram surface with their claws and wings - about $\frac{1}{2}$ " to 1" deep and about 3" in diameter, settling into these 'excavations' and rubbing their underparts (under-tail coverts, abdomen and breast) vigorously against the hard surface underneath. The airfield was pitted with these shallow 'baths' and in the evenings particularly, one could watch any number of these birds engaged in this activity. Is this a de-lousing process or has it some other significance?

Cdr. N.S. Tyabji
New Delhi.

Crimson Breasted Barbet.

Both the Large Green Barbet and the Crimson Breasted Barbet are in full cry at this season in Delhi though they are certainly present in these numbers throughout the year (somewhat silent during the winter months).

The other morning I watched an interesting spectacle of a Crimson Breasted Barbet feeding its young and record it for what its worth.

The nest was cut in a dead branch of a Coral Tree with its entrance hole, as usual, in the underpart of the branch. On this occasion, I first saw the half-grown young with no crimson on forehead or breast, peeping out of the nest or rather hanging half out of it expectantly waiting for the parent to arrive with its next morsel of food. Looking around I noticed the parent bird with a berry held firmly in its bill alight on a nearby tree, call two or three times and then fly directly over to the nest hole to which it clung somewhat in the nature of a Woodpecker. The young bird, obviously hungry, started pecking violently at its parent which held on to the berry. The older bird then quite deliberately looked up, then down, to the right and then to the left with quick typical Barbet movements as if to make certain that nothing else was around. Having gone through this routine, it gradually started making the fledgling back into

in the nest and even when I placed the flower pot close to the nest on the sun-shade itself she was not attracted. I then made the nest more comfortable by padding it up with some more dry grass. To my pleasure, I found that it attracted the dove next day and a couple of days later I found that there were two eggs in the nest instead of one. Thereafter I removed the flower pot and placed it back in its original position and the dove kept on sitting on the eggs without any further trouble.

Dinesh Mohan
Central Building Research
Institute, Roorkhee (U.P.)

Small Indian Skylark.

The airfield area on Willingdon Island, Cochin, which consists of large expanses of grass and low bushes contains a large population of the Small Indian Skylark, Indian Pipit, Little Ringed Plover and the Redwattled and Yellow-wattled Lapwings.

It was a delight to watch the skylarks rising vertically into the air and filling the open spaces with their ecstatic song at practically all hours of the day. However, I would like to record one little fact about these birds which interested me considerably. In the airfield area which is mostly re-claimed land, morram has been used as a surface binder and I noticed that the skylarks were in the habit of making shallow excavations in the morram surface with their claws and wings - about $\frac{1}{2}$ " to 1" deep and about 3" in diameter, settling into these 'excavations' and rubbing their underparts (under-tail coverts, abdomen and breast) vigorously against the hard surface underneath. The airfield was pitted with these shallow 'baths' and in the evenings particularly, one could watch any number of these birds engaged in this activity. Is this a de-lousing process or has it some other significance?

Genl. N.S. Tyabji
New Delhi.

Crimson Breasted Barbet.

Both the Large Green Barbet and the Crimson Breasted Barbet are in full cry at this season in Delhi though they are certainly present in these numbers throughout the year (somewhat silent during the winter months).

The other morning I watched an interesting spectacle of a Crimson Breasted Barbet feeding its young and record it for what its worth.

The nest was cut in a dead branch of a Coral Tree with its entrance hole, as usual, in the underpart of the branch. On this occasion, I first saw the half-grown young with no crimson on forehead or breast, peeping out of the nest or rather hanging half out of it expectantly waiting for the parent to arrive with its next morsel of food. Looking around I noticed the parent bird with a berry held firmly in its bill alight on a nearby tree, call two or three times and then fly directly over to the nest hole to which it clung somewhat in the nature of a Woodpecker. The young bird, obviously hungry, started pecking violently at its parent which held on to the berry. The older bird then quite deliberately looked up, then down, to the right and then to the left with quick typical Barbet movements as if to make certain that nothing else was around. Having gone through this routine, it gradually started pushing the fledgling back into the nest with quick darting movements of first the head and then the whole

body, clinging to the edge of the entrance the while. Eventually with the young fully inside it entered the nest with a fluent 'hinged' movement, using its claws as hinges.

It emerged from the nest after about a minute and flew to a particular branch of a nearby peepal tree, collected a berry, flew to the branch first seen on and then to the nest. This was repeated seven times during the half hour I watched the nest.

An interesting observation was that the cycle of movements was exactly the same on each occasion even to the branches used prior to and after feeding the young - even to the perch on each branch!

On each occasion the parent bird left the nest the young bird was seen to return to the entrance and hang half out with a peculiar spasmodic movement of its throat as if it was trying desperately to call without being able to manage the sound.

To provide an epilogue, I may mention that 4 days later a thunderstorm brought down this particular branch and I was able, quite by chance, to recover it - the venue being the Delhi Gymkhana Club. The nest was empty and though a thorough search was made no young birds were discovered anywhere in the vicinity. The branch now forms an addition to our scheme of interior decoration!

The portion of the branch recovered is about 5' in length and housed three separate nests. The top portion, completely decayed shows the remains of a 4th. The vital statistics of the nests may be of interest:

Size of entrance hole	.. ..	uniformly	2½" diameter
Length of gallery	.. ..	"	9"
Length of wood between nests			3" - 4"

The branch was torn off about 3' below the entrance hole of the last nest - the scene of the episode recorded above.

In this particular case it would seem that though previous nests were available for occupation and were possibly their own, the birds preferred to build a new one a foot away from a perfectly habitable nest (or so it would seem to a mere human!).

Whistler in his Notes on the Coppersmith ('Popular Handbook of Indian Birds' - 4th edition - p.293) has this to say about the bird's nesting habits:

"The eggs are laid in a hole in the bough of a tree which is used and lengthened year by year until it may attain the length of 4 or 5 feet. The entrance is invariably a neat round hole cut by the birds themselves, usually on the undersurface of the bough; but though the gallery often cuts into a natural decayed hollow which is then smoothed and used. When the passage of several years has lengthened the hollow unduly a new entrance is frequently cut nearer to the egg chamber. There is no nest, the eggs merely lying on chips and debris. The nest hole is at any height from 7 to 40 feet from the ground." (In the present case it was about 15 feet from the ground).

If this is the rule then the presence of 3 separate nests in the same branch requires explanation. I would be grateful for enlightenment!

Cmdr. N.S. Tyabji
New Delhi.

The Lesser Whistling Teal on Back Bay Waters.

It may interest readers of the Newsletter to learn of a flock of ten Lesser Whistling Teal (Dendrocygna javanica) which settled on the salt waters of the Back Bay, at Chowpatty, Bombay on 6th May 1961. It happened at 17.45 hours, and the birds were seen about the place for about half an hour thereafter.

The flock was seen to fly in low over the water (about 2 ft. above it) from the direction of the open sea, and settle in the Bay about 200 yards away from the Chowpatty shore line. The crowded beach, as also a fishing snack that passed the flock some 50 yards away from it, did not seem to frighten the birds.

After settling on the water the teal engaged in bathing and intermittent wing flapping, the whole flock keeping close together. A solitary crow that was playfully winging its way over the water located the teal and started stooping at, and chasing them when put up. After a short flapping flight the flock settled again some distance away from the first place of landing. But they were not to be left in peace. A second crow now joined the first and the two kept up the stooping and chasing game. After being thus harrassed by the crows for about half an hour the flock of teal was seen beating back towards the open sea, the direction whence they had come. They were now flying at a height of about 30 ft. above water.

It will be interesting to know from readers of any previous incidents of duck settling on the Chowpatty waters. In November 1959 a Coot was seen one morning swimming on the Chowpatty waters, where it met its end, being stoned to death by an urchin with a catapult.

J.S. Serrao
Bombay.

Bird Migration over Bombay City.

On the evening of the 17th of March I was sitting in my house and as my wife was looking through the window, she noticed a very unusual phenomenon. She actually saw thousands of birds going in the direction of the west in a continuous stream. The birds were coming from the east and were going towards the west. They came in batches and the flow was intermittent and could even be said to be continuous because the gap between successive groups was a small one. This procession was first noticed at 7.15 p.m. and actually continued till about half an hour. I took out my binoculars which were not very powerful and I noticed that the birds in procession in silhouette presented black colour, their wings were heavy and the necks were not long. They were moving in one continuous direction from west to east and we also noticed that some birds used to come back in the reverse direction to hold a sort of a short conversation with some other birds and resume the journey towards the west. It was not possible to count the birds but I can say with confidence that the number must have exceeded several thousands. I tried to identify the birds but as it was dark and the binoculars were not very powerful I could not identify them. But my feeling was that they were of a type of Starlings and may be even the Rosypastors.

The procession appeared to be as one of migration. These birds appeared to have come from the Chowpatty side and were going through the city towards the east. We actually watched this procession for over 20 minutes. I had never observed any such phenomenon before and I wonder whether other bird lovers in Bombay may have made any similar observation.

Justice S.G. Patwardhan
100, Girgaon Road,
Bombay - 6.

Bird Study Camp in Kutch.

During the Bombay Natural History Society's recent bird migration study field camp in Kutch (March 1961) a few nets were put up one morning in the same 2-mile square plot of scrub jungle at Changalra, near Bhuj, where all the ringing had been done in September 1959. Among the twenty or so birds caught were two bulbuls, 1 Redvented, 1 Whitecheeked - ringed here 18 months ago. The birds, then registered as adult, seemed perfectly healthy and were in freshly moulted plumage. The case gives an indication of the usefulness of ringing as a means of procuring definite data about the longevity, and parochiality and local wanderings even of our so-called 'Resident' birds, of which little is known.

Salim Ali.

CORRESPONDENCE:

"I write to thank you ever so much for the most interesting "NEWS LETTERS FOR BIRD WATCHERS", which I have been receiving regularly. I must apologise for being so slow in expressing my gratitude, largely because of my migration from Chini during the winter. This is an interesting part of the world from the point of view of studying bird-migration. During my forthcoming tours in this Himalayan District, I shall, of course, keep my eyes and ears wide open for anything of interest for bird-watchers, which I shall be glad to send you."

N.D. Jayal
Deputy Commissioner,
Kinnaur District,
CHINE (via Simla
Himachal Pradesh.

"A member informs me that 3 or 4 nesting sites of the Pariah Kite (Milvus migrans govinda) in Bombay City, which he has had under observation for several years have not been successfully used this season, though the birds were present. He suggests that there is something radically wrong with their breeding this year.

Will you please let me know if you have any information in support or otherwise."

Humayun Abdulali
Honorary Secretary,
Bombay Natural History Society,
Bombay 6.

"Thank you very much for the Newsletter, which I am receiving regularly and which I enjoy reading. I find it most interesting and informative for a beginner like me.

Frankly speaking I do not think I qualify myself to be a member of your Society, as my knowledge is very much limited. Being a novice. I get much pleasure in watching birds from whatever little opportunity I get from our city life. To fill up the gap I like to read what I get about birds - mostly Indian. I shall be very pleased to be a member of the Ornithological Society."

Mrs. Sakuntala Ray
1, Lansdowne Road, Calcutta 20.

- 9 -

"I want to express appreciation for the "News Letter for Bird Watchers", your efforts to form an Ornithological Society in India are praiseworthy and I wish you success in your efforts!

The paper on "Birds of Gujarat", written by Yuvraj Shri Shivraj Kumar, would be of special interest to me since I had at one period collected birds of the Dangs for the American Museum of Natural History in New York. Since I do not know the address of the author, will you kindly have him send me a copy please?

Personally I think that the beautiful Indian Peafowl would make a much more interesting national bird than the Great Indian Bustard. I have 1136 species of birds in my "life list of birds" but I have never yet even seen the Great Indian Bustard. Beauty, national sentiment, familiarity, etc. should not be ignored in the selection of a national bird, national flower or national tree. The Great Indian Bustard must be protected but that is another matter.

The national bird of America, the Bald Eagle, is a symbol of bold strength and courageous character.

The Indian Peafowl is a symbol of the beauty and grace of the East. I would vote for it as the national bird of India.

Thank you again for sending me the News Letters for Bird Watchers."

E.M. Shull
Ahwa, via Bilimora,
Dangs Distt., Gujarat State.

"I was particularly interested in Dr. Salim Ali's article on the proposed National Bird contained in your News Letter for Bird Watchers No. 6 of May 1961.

Surely Dr. Salim Ali is not correct in saying that all British birds are common to Europe? How about the Red Grouse or the St. Kilda Wren?

So far as a National Bird for India is concerned he plumps for the Great Indian Bustard. A very good choice too if one confines oneself solely to the idea that the bird should be one that is in most need of protection. A thought, however, that has occurred to me is that perhaps - if one wishes to emphasise the purely "National" concept - it might not be right to choose a bird that has a (very similar) European/North African counterpart. A bird that strikes me as being purely Indian by distribution and, at the same time, sadly in need of protection, is the Floriken - or has it, too, a counterpart overseas? To go to the opposite end of the scale a purely Indian, and very beautiful, little bird is the Purple-Rumped Sunbird, though I agree it needs no protection.

Another bird, however, that does need protection is the Great Hornbill, which is getting so rare. It however is not confined solely to India.

A large, beautiful and easily recognisable, bird, familiar to the people of North India is the Sarus Crane.

I throw out the above suggestions not having gone, I am afraid, thoroughly into the matter so I shall not be at all surprised if Dr. Salim Ali and you reject them out of hand!

P.H. Sykes
Tribeni Tissues Private Ltd.,
P.O. Box No. 9124,
24B, Park Street, CALCUTTA 16.

July, 1961

An experiment to develop an artificial nesting site for the Green Barbet

A Green Barbet was once observed near the entrance hole of one of the nest boxes put up in New Forest, Dehra Dun. The bird did not enter the box, but it gave the impression that it would accept a suitably designed nest box.

It appears from books on Indian birds that the Green Barbet usually excavates a new nest hole every season. A nest box that would require some tunnelling, seemed, therefore, to have the best chance of being acceptable to the bird.

An internode of a giant bamboo was used as the box. The top was cut open and a lid was fitted as is usually done for the nest boxes. Suitable packing material was used to ensure that no light entered the box through gaps between the lid and the top of the box. A section, about 10cm x 7.5cm, of the front wall of the box was cut out and the opening was plugged with a 3cm thick piece of soft wood which was of a light colour. A piece of plywood in which a hole, 5.1cm in diameter, had been cut was fixed on the outer side of the wooden plug. The plywood was painted with dark brown paint so that, by contrast, the portion of the wooden plug visible through the circular hole was quite conspicuous. Finally, the front exterior surface of the bamboo was roughened to give a foothold to any bird that would want to work on it.

The box was put up on April 2 (1960). Three weeks later a small hole was visible in the wooden plug and wood chips were seen scattered on the ground below. Throughout the next day a Green Barbet was heard calling from a tall tree to the east of the site of the box. At 6.20 p.m. another Barbet arrived on the tall tree. The first bird immediately flew down to a tree north-west of the box and kutroo-ed from there. Then it flew to a tree south-west of the box and kutroo-ed. Next it flew to a tree south of the box, but quite near to it, and kutroo-ed for 3 minutes. At 6.33 p.m. the bird settled at the entrance to the box and worked on it for 8 minutes enlarging the hole. At the end of this period, while still clinging to the nest box, the bird called a dozen times. Then it settled on a branch nearby and called continuously for 10 minutes before disappearing into the foliage of the tree.

Two pairs of Blackheaded Mynas were at the box the next day. They fought among themselves for possession of the box. Later on Greyheaded Mynas, Jungle Mynas, Common Mynas and Striped Squirrels joined in the squabble. The winners were a pair of Blackheaded Mynas who finally nested in the box.

It is not clear why the Barbets gave up the nest box. But the result seems to indicate that further experiments would lead to success.

Joseph George
New Forest, Dehra Dun.

Family Parties of Birds:

It is normally assumed, as a matter of course, that a family party or feeding flock of birds that frequents a certain garden regularly or follows a regular beat, and apparently more or less constant in size, is composed of the self-same individuals. That this assumption may not always be correct is suggested by a recent ringing experience in the U.K. Lt. Col. R.S.P. Bates, the well known photographer of Indian birds and joint author of BREEDING BIRDS OF KASHMIR, in a recent letter to Dr. Salim Ali writes:

"Between May and December 31st Peter Davis (an enthusiastic ringer) ringed no less than 400 Blue and Great Tits in his garden (in Surrey) of less than 1 acre. In other words there is a continuous stream, and when people talk about having the same "dear little birds" at the bird table day in and day out they are more often than not seeing different birds every time. Two months or so ago I had a ringed Blue Tit and a ringed Great Tit on my bird tray at the same time. I put up my trap and failed to catch either; but 10 days later, and about another 10 days later, I again saw a ringed Blue Tit and a ringed Great Tit in the garden. Eventually, on February 20th I caught the ? Blue Tit. (? because I didn't see the Great Tit that day, so it could have been a different Blue Tit.) It turned out to have been ringed by Davis near Marley Common (just below his house) on November 21st. Do these feeding bands have their own pet beats I wonder, and how much ground do they cover? The direct distance in this case is 12 or 13 miles.

The other point was about a family party of Longtailed Tits. In this case a party of 12 was often in his garden and eventually he ringed the lot. In doing so he noticed that once ringed they would come to an adjacent table but the ringed ones would not enter the trap. One day he saw an unringed one amongst the 12 (the total still being 12!). That one went quite happily into the trap and was duly ringed. On next visit there were no less than 6 unringed ones. Eventually, out of that party which has never exceeded 14 birds and now seems to be 13, he has ringed no less than 25 !! Strange, to say the least of it! In other words an interchange amongst these so-called family parties must occur. Perhaps two parties meet and one or two birds get lost from one to the other. If they are really family parties in the first place, such gains and losses would at least ensure against too much inbreeding."

Economic Value of Birds:

Bird watching has become a highly respectable pastime in Europe and America. There, its aesthetic and economic importance is deeply appreciated. In India, perhaps inevitably so in an under developed country, any activity must pass the economic test, before it receives official blessing or public support. It may, therefore, not be out of place to try and assess the various ways in which birds have proved useful to human beings in the purely material sense.

A very good account of the economic value of birds is found in the Introduction to Ornithology by George Wallace, and what follows is largely taken from this book.

It is not known whether people have made use of the migratory routes of birds for purposes of navigation. However, one of the first published references on this subject pertains to Columbus. While his rebellious crew was on the verge of mutiny, not knowing how far away they were from land, Columbus saw a group of land birds flying eastward. These were October migrants en route from North America to the West Indies. He changed his course to follow the birds to land. If Columbus had not been a keen bird watcher his expedition might have failed, and the course of history considerably altered.

From the earliest times birds have of course been a valuable item of food for man, but it is not realised what a staggering quantity of birds were shot in the early days when new settlements were established on virgin soil. Chapman speaks of an 1864 shipment of 20 tons of Prairie Chickens, of 14,850,000 Passenger Pigeons, shipped from a Michigan nest site in 1861, and of 5½ million game birds on the New Orleans market in 1909. It is said that the recently re-discovered Cahow or Bermuda Petrel is known to have saved some of the early colonists from starvation, during the famine of 1614 to 1618.

In the now affluent U.S.A., proper checks have been introduced on indiscriminate hunting of birds. In the less materially well off countries the netting of birds for food has been continuing on a vast scale, and enlightened legislation which has been passed in recent years will still take a long time before its effects are felt.

As a result of lessons learnt in the past, the annual harvest of birds is restricted to the game species during especial seasons. Even with these curbs, bird meat on the table is no small item. The legal take of water fowl in the U.S., even in a short season runs close to 20 million birds annually. Pheasants, Grouse and Wood-Cock reach sizeable figures and with proper conservation and management, the annual killing of birds for sport, does not deplete their total numbers.

Eggs of wild birds also, form an important item of food, notably in Holland and Germany. In the far East the Chinese have skillfully domesticated a species of Quail, and the eggs of these birds are considered to be a great delicacy.

Apart from their meat, birds possess various accessories for which they have been highly prized. The beaks of Ivory Billed Woodpeckers were in great demand as decorative ware. The plumages of birds have been marketed for arrow making, head gear and other purposes. The feathers of the Grey Jungle-Cock are still being used as fishing flies, and though this has now become a banned item in India, these feathers continue to be smuggled into Goa from where they are exported to other countries. Salim Ali refers to this in another article in this Newsletter.

It is said that one of the most elaborate feather works in the world was perfected in Hawaii. Feather cloaks worn by the nobility composed only of the breast feathers of small birds were priced at \$ 10,000/-. The high price of eiderdown quilts is well-known.

Birds have sometimes been used for oil. One rather cruel practice is the lighting of the oil bodies of small Petrels to serve as torches. In northern South America in caves along the sea coast the young of the oil bird (Steatornis caripensis) are fed on a rich fruit of palm trees until they become helpless globs of fat, and they are then collected by the natives who melt out the oil into earthen pots for use.

But one of the most valuable products for which birds are responsible is guano, the droppings of fish eating birds, which is perhaps the finest fertilizer known to man. The most productive region for guano is off the rainless coast of Peru among colonies of the Guanay Cormorant (Phalacrocorax bougainvillei). The volume of guano accumulated over the centuries on guano islands is quite unbelievable, and this fertilizer was a mainstay of the economy of Peru. In a fascinating talk on sea birds given in Bombay, a couple of years back Dr. Cushman Murphy of the American Museum of Natural History, stated that Cormorants did not defecate over the ocean, but only on the guano islands, thus ensuring the maximum accumulation of these deposits. It was suggested by him that this "civic mindedness" of the cormorants was due to the necessity of keeping the waters clean, so that the birds could see the fish for a long distance below the water.

In India, there are no large deposits of guano, but in many areas, colonies of storks, pelicans, cormorants and other fish eating birds are protected by villagers who realise the value of their droppings for agricultural purposes. E.P. Gee in an article in the journal of the Bombay Natural History Society

shot in the early days when new settlements were established on virgin soil. Chapman speaks of an 1864 shipment of 20 tons of Prairie Chickens, of 14,850,000 Passenger Pigeons, shipped from a Michigan nest site in 1361, and of 5½ million game birds on the New Orleans market in 1909. It is said that the recently re-discovered Cahow or Bermuda Petrel is known to have saved some of the early colonists from starvation, during the famine of 1614 to 1618.

In the now affluent U.S.A., proper checks have been introduced on indiscriminate hunting of birds. In the less materially well off countries the netting of birds for food has been continuing on a vast scale, and enlightened legislation which has been passed in recent years will still take a long time before its effects are felt.

As a result of lessons learnt in the past, the annual harvest of birds is restricted to the game species during especial seasons. Even with these curbs, bird meat on the table is no small item. The legal take of water fowl in the U.S., even in a short season runs close to 20 million birds annually. Pheasants, Grouse and Wood-Cock reach sizeable figures and with proper conservation and management, the annual killing of birds for sport, does not deplete their total numbers.

Eggs of wild birds also, form an important item of food, notably in Holland and Germany. In the far East the Chinese have skillfully domesticated a species of Quail, and the eggs of these birds are considered to be a great delicacy.

Apart from their meat, birds possess various accessories for which they have been highly prized. The beaks of Ivory Billed Woodpeckers were in great demand as decorative ware. The plumages of birds have been marketed for arrow making, head gear and other purposes. The feathers of the Grey Jungle-Cock are still being used as fishing flies, and though this has now become a banned item in India, these feathers continue to be smuggled into Goa from where they are exported to other countries. Salim Ali refers to this in another article in this Newsletter.

It is said that one of the most elaborate feather works in the world was perfected in Hawaii. Feather cloaks worn by the nobility composed only of the breast feathers of small birds were priced at \$ 10,000/-. The high price of eiderdown quilts is well-known.

Birds have sometimes been used for oil. One rather cruel practice is the lighting of the oil bodies of small Petrels to serve as torches. In northern South America in caves along the sea coast the young of the oil bird (Steatornis caripensis) are fed on a rich fruit of palm trees until they become helpless globs of fat, and they are then collected by the natives who melt out the oil into earthen pots for use.

But one of the most valuable products for which birds are responsible is guano, the droppings of fish eating birds, which is perhaps the finest fertilizer known to man. The most productive region for guano is off the rainless coast of Peru among colonies of the Guanay Cormorant (Phalacrocorax bougainvillei). The volume of guano accumulated over the centuries on guano islands is quite unbelievable, and this fertilizer was a mainstay of the economy of Peru. In a fascinating talk on sea birds given in Bombay, a couple of years back Dr. Cushman Murphy of the American Museum of Natural History, stated that Cormorants did not defecate over the ocean, but only on the guano islands, thus ensuring the maximum accumulation of these deposits. It was suggested by him that this "civic mindedness" of the cormorants was due to the necessity of keeping the waters clean, so that the birds could see the fish for a long distance below the water.

In India, there are no large deposits of guano, but in many areas, colonies of storks, pelicans, cormorants and other fish eating birds are protected by villagers who realise the value of their droppings for agricultural purposes. E.P. Gee in an article in the journal of the Bombay Natural History Society August 1960, has given an account of a number of areas where pelicans are

well looked after by villagers: "The attitude of the local villagers to the pelicans was interesting. Some of them said to me through an interpreter, that it was wrong to shoot or harm the pelicans which were visitors, coming every November. They brought good health to their villages, said some of them, and their excreta provided a good fertilizer for their fields. Others said they did not disturb or harm the pelicans, as these birds did no harm to them." The Vedanthangal Waterbird Sanctuary near Madras has received traditional protection for the same reason.

Mr. Gee refers to the disturbing fact, about some lakes where pelicans have thrived in the past, being drained as part of an agricultural project. Alternative sites will have to be found for these birds and he suggests that "some of the new sheets of water formed by the multi-purpose hydro-electric and irrigation projects in fast developing India may eventually help provide the answer to this problem."

Birds that subsist on fish have been persecuted in many places without adequate evidence being procured about the extent of the damage which they actually cause. The most alarming example of this has been of the Bald Eagle in Alaska. Between 1917 and 1950, 1,14,000 eagles were collected for a bounty of more than \$ 100,000/-. Recent studies have shown, however, that apart from a few partly spent salmon taken directly on the spawning ground, nearly the whole catch was of dead and dying fish that has finished spawning. Human beings are slow in learning that the cycle of nature should be disturbed only for the most compelling reason. Usually there is a great deal of method in Nature's madness.

The great economic value of birds in the destruction of insects is being increasingly appreciated. In Newsletter 7 Salim Ali mentioned that the Council of Scientific and Industrial Research has approved a project to study the impact of birds on the overall control of vegetation. The role of Rosy pastors in checking the locust menace, and of birds in general, in keeping insect population in check need not be emphasised to readers of this Newsletter. No direct mention of birds has been made in our Third Five Year Plan. But that their importance to human welfare is being realized is apparent from the modest schemes being sponsored during the 3rd Plan for research on the economic value of our wild birds.

Zafar Futehally

Sunbirds 'flycatching':

Observations somewhat similar to that reported by P.W. Soman in the Newsletter for June on the 'flycatching' habit of the Purple Sunbird have been made in Dehra Dun also. On an overcast July day, one male and two female Purple Sunbirds were observed taking insects on the wing for over 30 minutes. The birds operated from a power line and averaged about one aerial sortie per minute per bird. A pair of Pied Bush Chats joined them in the hunt for some time. Green Bee-eaters circled above the Sunbirds and House Swifts dashed about at a still greater height.

On more than one occasion male Purple Sunbirds have been observed taking winged termites also in the air. The birds carried their victims to a perch till their wings fell off. The termites were then swallowed.

Joseph George

NOTES AND COMMENTS

Some readers of the Newsletter may be unaware of the existence of a Bird Wing of the quasi-governmental organization known as the Indian Board for Wild Life. The Wing functions as an expert advisory committee of the Board on all matters pertaining to the preservation of wild birds in India. For foreign contacts the Bird Wing is recognized by the Government of India as the Indian National Section of the International Council for Bird Preservation. The Bird Wing is composed of the following institutions and individuals:

Chairman	...	Dr. Salim Ali
Technical Secretary....		Dr. Biswanoy Biswas
Indian Board for Wild Life.		Represented by (1) The Inspector General of Forests, Shri V.S. Rao, I.F.S. (2) Secretary, I.B.W.L., Shri K.A. Ansari (Under Secretary, Ministry of Food & Agriculture)
Zoological Survey of India.		The Director (Dr. M.L. Roonwal)
Bombay Natural Hist. Society.		Shri Sumayun Abdulali
Delhi Bird Watching Society.		Capt. S.K. Chatterjee, I.N.
Nominated members.	...	R.S. Dharmakumarsinhji
		Dr. S.C. Law
		Mr. E.P. Gee

The International Council for Bird Preservation (ICBP) which was formed in 1922 has already done excellent work in helping its member nations to stop the commercial exploitation and destruction of their bird life. India became a member of the ICBP in 1952. Among the advantages that have come to us because of the membership is that we have been able, to some extent, to control the smuggling out of feathers of the Grey Junglecock (Gallus sonneratii) by calling attention of the governments of the importing countries through their respective national sections to this illegal activity. The Lacey Act of the U.S.A. passed at the instance of the ICBP provides for reciprocal banning of import into the U.S. of any birds or their products whose export is banned by the country of origin. It is believed that though most of the Junglecock feathers are undoubtedly collected in Indian territory, they are smuggled across the land frontier into Goa whence they are exported to the U.S.A. (and U.K.) as of Portuguese origin. Portugal only recently became a member of the ICBP but it has apparently not placed a ban on the export of these feathers.

Again for years, the ICBP has been urging the Indian Government by strongly worded resolutions at each successive international conference to take effective action to protect one of our most magnificent birds, the Great Indian Bustard, which is in danger of total extermination. Partly as a result of this international concern the bustard now enjoys complete legislative protection. But it is one thing to pass a law, and another to see it enforced. The anxiety of the ICBP has by no means been allayed.

At the world meeting of the ICBP held in Tokyo last year, it was decided to form an Asian Section on the lines of the already existing Pan-American and European Sections. While there is already a keen appreciation in most countries of Europe and America of the sort of work that needs to be done there for bird preservation, Asian countries with rare exceptions are still apathetic. Japan, having already passed through the phase of destruction of most of its bird life, has now become doubly aware of its evils and of the urgency of taking steps for future preservation.

The first President of the Asian Section is the well known Japanese ornithologist Dr. Yoshimaro Yamashina. The two Vice-Presidents are one from Korea, the other from India. The former will maintain liaison with S-E Asian countries, the latter with those of western Asia. One of the first countries of western Asia to join the Asian Section is Israel. It is to be hoped that many other countries will follow Israel's example.

Apart from the Societies and individuals nominated by the Government of India forming the Indian National Section, a provision recently embodied in the ICBP's constitution provides for individual sympathisers with its aims and objects to join the Council in their private capacity as Contributing Members on payment of an annual subscription of Rs. 25 or more. This membership entitles them to receive the periodically published ICBP Bulletin and participate in world conferences of the ICBP. They enjoy all the rights and privileges of representatives of the national sections with the exception of individual voting.

BOOK REVIEWS:

We are glad to announce the long-awaited publication by the Bombay Natural History Society of two books of special interest to bird watchers and students of ornithology in India: A SYNOPSIS OF THE BIRDS OF INDIA AND PAKISTAN (together with those of Nepal, Sikkim, Bhutan, and Ceylon) by Prof. S. Dillon Ripley of Yale University, and the sixth edition of THE BOOK OF INDIAN BIRDS by Salim Ali.

The former is quite indispensable as a work of reference for catching up with the numerous and frequent changes in the taxonomy and scientific names, and the sequence of Orders, Families, Genera, and Species that have been necessitated due to the intensive researches of specialists during the 30 years since the last volume of our standard FAUNA OF BRITISH INDIA series on Birds appeared. The new arrangement superficially seems merely a reversal of the old; i.e. where the FAUNA began with the Crows and ended with the Grebes, the SYNOPSIS commences with the Grebes and finishes with the Perching Birds (Passeriformes), though with the Buntings instead of the Crows. In other words, it begins at what is believed to be the bottom of the evolutionary ladder and climbs to the top, instead of the other way round - a manifestly more rational sequence.

This new arrangement is now accepted and followed, with minor variations, more or less throughout the ornithological world. In spite of the initial inconvenience and confusion it may cause to Indian bird students conditioned by the FAUNA, there is no getting away from the necessary re-orientation. The sooner it is achieved the better for our science. Moreover, in effect, the SYNOPSIS brings Indian ornithology completely up to date also in other ways; it is more than just a checklist since, in addition to a critical appraisal of the races recognizable within our sub-continent, it gives the revised geographical distribution together with the ecological habitat of each bird. The price of the book - over 750 pages - has not yet been finalized, but it is expected to be in the neighbourhood of Rs. 30/-.

Most readers of the Newsletter are no doubt already familiar with THE BOOK OF INDIAN BIRDS which has been out of print and unobtainable for over a year. The chief feature of the present edition, which is closely integrated as regards scientific names etc. with the SYNOPSIS, is the 8 additional coloured plates illustrating 32 extra species. Thus instead of 56 coloured plates in the previous edition it now has 64, and instead of 224 species of birds it now covers 232. The new plates, specially painted by a well-known German artist, are excellent. The last one is particularly useful as it depicts three of our rarest birds - Pinkheaded Duck, Mountain Quail and Jerdon's Courser - about the status or whereabouts of which no recent information is available. Side by side with the Pinkheaded Duck is shown, for comparison, the Redcrested Pochard, a species with which present-day sportsmen have often tended to confuse the former in the field. In view of the additional plates and text, and the mounting costs of paper and printing, the price of the book has been increased from Rs. 20/- to Rs. 25/-. Members of the Bombay Natural History Society will get it at Rs. 20/-. Both books can be had from the publishers, 91 Walkeshwar Road, Bombay 6.

CORRESPONDENCE:

"I have much appreciated receiving the 'NEWS LETTER' for bird watchers, and am sorry I have not written before. I would willingly pay a subscription if you will let me know whether a club has been formed.

As I am leaving India shortly I have resigned my membership of the Bombay Natural History Society, as I am only interested in the Birds Watching side, and very elementary ornithology, and do not feel that I can carry on the heavy subscription to the B.N.H.S.

I have somehow missed two of the News Letters, No. 1 and No. 4 and would be very grateful if you would kindly let me have spare copies if possible."

J.H.H. Peppe
Birdpur Estate & P.O.
District Basti, U.P.

"Thank you very much for all the News Letters you have sent me. I have found them very interesting and I strongly support the idea of an ornithological Society which, if kept on an amateur level, will undoubtedly attract many bird-lovers in India."

M.C.A. Jackson
Munjamullay Estate,
Vandiperiyar P.O.,
Kerala State, S.I.

"Recently I received the latest issue of the News Letter. I think it is the best of all the issues of NS so far published. I am glad you are developing it along the right line. Congratulations."

Dr. R.M. Naik
Faculty of Science,
Zoology Department,
Baroda.

"Would it be possible for you to publish an abstract of the article by Dr. David Lack referred to on page two of the News Letter for April? I am very much interested in it, but the journal is not available here.

Incidentally, this brings to mind a very useful service which the News Letter can do; namely, publication of abstracts of papers on birds appearing in various journals. If you would like to initiate a literature service of this nature, I shall be glad to give all the help I can."

Joseph George
New Forest, Dehra Dun.

"Thank you very much for regularly sending the news letter. This is indeed a great service in the Field of Natural History. I find this most interesting and informative. I would therefore request you to kindly continue to keep us on your mailing list."

B.V. Ramanjulu
Superintendent,
Govt. of India, Delhi Zoological Park, New Delhi.

August, 1961

BIRDS AND PLANTS

Extracts from a lecture given by Dr. Salim Ali to the Singapore Branch of the Malayan Nature Society:-

It is only within comparatively recent years, with the development of scientific forestry practices, that the contribution made by birds in the character and distribution of natural vegetation and in the promotion of healthy and economically sound forests has begun to be properly appreciated. Earnest efforts are now being made to rehabilitate beneficial birds like woodpeckers and tits which by a too severe management of the forests and the removal of all dead trees, etc., had been deprived of nesting sites and other natural requirements, and forced to withdraw.

The services of fruit-eating birds in the dissemination of seed and the distribution of plant species - and thus in influencing the character of vegetation in general - are also of incalculable magnitude and importance, although from the point of view of human economics they may by no means always be wholly beneficial.

Among the harmful results produced by frugivorous birds, as far as India is concerned, one of the examples that immediately springs to mind, is the phenomenal spread of that notorious Mexican weed Lantana, which was first introduced into Ceylon as an innocent ornamental pot plant as late as some 150 years ago. Due largely to the agency of birds which devour its berries avidly and broadcast its seeds far and wide, it has now overrun hundreds of thousands of square miles of the Indian subcontinent with a rapidity, vigour, and luxuriance that has made it the despair of agriculturist and forester alike. Another familiar example is furnished by the destructive parasitic mistletoe family LORANTHACEAE whose numerous members infest trees in mango and timber plantations causing damage that must run into millions of rupees annually.

Fruit-eating birds swallow drupes and berries and pass out the hard seeds in their droppings intact. Such seeds are not only unaffected by the digestive juices of the bird's stomach, but, it is claimed, they even show a higher percentage of germination and produce stronger seedlings than those which have not had this advantage.

On the credit side of the bird's seed dispersal account, also, two significant entries may be cited. The flourishing sandalwood and oil industry of southern India, which yields a substantial revenue to the State of Mysore, owes its existence largely to frugivorous birds like bulbuls and barbets which swallow the berries of the sandalwood tree (Santalum album) and disseminate the seeds far and wide, thus ensuring widespread natural regeneration of the tree. And such are the complex chains of cause and effect in Nature that one feels almost tempted to give vicarious credit to our native birds, at least in part, for India's supremacy in the sport of hockey. The links in this chain are as follows: the basis of the comparatively young but vigorous sports goods industry in the Punjab, which supplies all the championship-winning hockey sticks, is the mulberry tree (Morus indica). When the desert areas of the Punjab were first colonised by the introduction of the vast network of irrigation canals, the mulberry tree was planted along their banks as a fast-growing soil binder. The local birds took to the fruit with such zest that within a very short period the mulberry became abundant and paved the way for the flourishing plantations which furnish the raw material for badminton and tennis rackets, cricket bats, hockey sticks and numerous other sports requisites. This bird-assisted industry now not only caters for practically the entire needs of the country, but also earns a sizeable amount of much-needed foreign exchange by exports abroad.

So much for seed dispersal by birds.

While every elementary school reader extols the work of bees, butterflies and other insects in transporting the pollen of one flower to the next and cross-fertilizing it in return for the nectar it provides, few people realize or even suspect, the significant role that birds play in the same process.

Botanists know that although self-fertilization normally produces weak and sterile progeny, in some cases it may by itself suffice for the propagation of an unlimited number of seemingly healthy and fertile generations of a plant. But, in the struggle for existence, whenever such plants as are the offspring of self-fertilization are thrown into competition with the offsprings of cross-fertilization, the former are at a vital disadvantage, and on the whole Darwin's oft quoted aphorism that "Nature abhors self-fertilization" stands fully vindicated. Thus it is clear that every peculiarity and variation in the form and structure of a flower which helps to promote cross-fertilization will be retained and perfected by Natural Selection. This is amply demonstrated by flowers which have become specially adapted for fertilization by birds. The most highly organized of these possess certain well-marked characteristics which differentiate them in a general way from those that are pollinated by insects, the wind, or other agencies. Broadly speaking, the chief characteristics are:

1. Possession of bright and conspicuous colours which serve to advertise the flowers by reacting strongly on the well-developed colour sense in birds.
2. Their structure and pollenizing mechanism is such as to render the transfer of pollen possible, partly or wholly, through the nectar-seeking activities of birds.
3. They secrete a particularly copious supply of nectar, which is a boon to thirsty birds in the tropics where many trees blossom in the dry season.

The mechanics of ornithophily (which is merely an imposing name for pollination by birds) is simple. Attracted by the brilliant colours which beckon as an advertisement and a sign-post in the distance, the bird alights at the flower and proceeds to insert its bill into the corolla to get at the nectar situated deep down within the flower tube. The sugary nectar of flowers is highly nutritious. It is rich in carbohydrates and provides both food and drink to the birds, supplying the 'fuel' for their intense metabolism and restless activity. Many tropical birds, e.g., Humming Birds of the New World and the Sunbirds of the Old, subsist largely, if not exclusively, on this diet.

In attempts to reach the nectar with its bill, the bird's forehead, throat, and breast first come in contact with the essential reproductive organs of the flower - the stamens and style - which are so placed as to project beyond the petals. Some of the golden pollen dust (male element) from the anthers adheres to the bill and to the feathers of these parts. When the bird visits the next flower in its quest and repeats the manoeuvre, this transported pollen gets brushed on to the stigma (female element) and results in cross-fertilization and, in turn, the production of fertile seeds which will germinate to produce further healthy generations of the plant.

Complemental to the special adaptations seen in the most highly organized ornithophilous flowers, a number of special adaptations for nectar-eating have also been brought about by Natural Selection in their typical bird visitors. I shall confine my remarks to the Indian sub-region, where the pride of place must undisputedly go to the widely spread family of sunbirds - NECTARINIIDAE.

The sunbirds have developed highly specialized mouth parts in their bill and tongue. The bill is long and slender, slightly decurved, and more or less cylindrical in section - admirably suited for probing into flower tubes. The tongue is narrow, long, and extensile, capable of protrusion much beyond the bill-tip. Its edges are rolled inwards to form a closed channel, or

While every elementary school reader extols the work of bees, butterflies and other insects in transporting the pollen of one flower to the next and cross-fertilizing it in return for the nectar it provides, few people realize or even suspect, the significant role that birds play in the same process.

Botanists know that although self-fertilization normally produces weak and sterile progeny, in some cases it may by itself suffice for the propagation of an unlimited number of seemingly healthy and fertile generations of a plant. But, in the struggle for existence, whenever such plants as are the offspring of self-fertilization are thrown into competition with the offsprings of cross-fertilization, the former are at a vital disadvantage, and on the whole Darwin's oft quoted aphorism that "Nature abhors self-fertilization" stands fully vindicated. Thus it is clear that every peculiarity and variation in the form and structure of a flower which helps to promote cross-fertilization will be retained and perfected by Natural Selection. This is amply demonstrated by flowers which have become specially adapted for fertilization by birds. The most highly organized of these possess certain well-marked characteristics which differentiate them in a general way from those that are pollinated by insects, the wind, or other agencies. Broadly speaking, the chief characteristics are:

1. Possession of bright and conspicuous colours which serve to advertise the flowers by reacting strongly on the well-developed colour sense in birds.
2. Their structure and pollenizing mechanism is such as to render the transfer of pollen possible, partly or wholly, through the nectar-seeking activities of birds.
3. They secrete a particularly copious supply of nectar, which is a boon to thirsty birds in the tropics where many trees blossom in the dry season.

The mechanics of ornithophily (which is merely an imposing name for pollination by birds) is simple. Attracted by the brilliant colours which beckon as an advertisement and a sign-post in the distance, the bird alights at the flower and proceeds to insert its bill into the corolla to get at the nectar situated deep down within the flower tube. The sugary nectar of flowers is highly nutritious. It is rich in carbohydrates and provides both food and drink to the birds, supplying the 'fuel' for their intense metabolism and restless activity. Many tropical birds, e.g., Humming Birds of the New World and the Sunbirds of the Old, subsist largely, if not exclusively, on this diet.

In attempts to reach the nectar with its bill, the bird's forehead, throat, and breast first come in contact with the essential reproductive organs of the flower - the stamens and style - which are so placed as to project beyond the petals. Some of the golden pollen dust (male element) from the anthers adheres to the bill and to the feathers of these parts. When the bird visits the next flower in its quest and repeats the manoeuvre, this transported pollen gets brushed on to the stigma (female element) and results in cross-fertilization and, in turn, the production of fertile seeds which will germinate to produce further healthy generations of the plant.

Complemental to the special adaptations seen in the most highly organized ornithophilous flowers, a number of special adaptations for nectar-eating have also been brought about by Natural Selection in their typical bird visitors. I shall confine my remarks to the Indian sub-region, where the pride of place must undisputedly go to the widely spread family of sunbirds - NECTARINIIDAE.

The sunbirds have developed highly specialized mouth parts in their bill and tongue. The bill is long and slender, slightly decurved, and more or less cylindrical in section - admirably suited for probing into flower tubes. The tongue is narrow, long, and extensile, capable of protrusion much beyond the bill-tip. Its edges are rolled inwards to form a closed channel, or rather two lateral tubes with a channel between - and the tongue terminates in a bifurcation. It functions as an efficient suctorial organ.

Through binoculars one may sometimes observe this slender worm-like tongue rapidly shooting in and out in a curiously snake-like manner while the bird is feeding at a flower.

In the second line of Indian nectar-eaters come the White-eyes (ZOSTEROPIDAE) and the Flowerpeckers (DICAIEIDAE) whose tongues show intermediate stages of this specialization. In Zosterops the tongue is not tubular nor markedly extensile. It is openly channelled and ends in two brushes of bristle-like papillae which help to mop up the nectar. In most of the DICAIEIDAE the channelled tongue ends in bifurcated half-tubes which also seem to be well adapted for nectar-eating.

Both flower-birds and bird-flowers reach their highest development as regards numbers and organization in the tropics, though they are not confined to them. The most highly organized nectar-eating families are the Humming birds (TROCHILIDAE) and Sugarbirds (COEREVIDAE) of tropical America, and the Sunbirds (NECTARINIIDAE), Flowerpeckers (DICAIEIDAE), White-eyes (ZOSTEROPIDAE) and Chloropses (IRENIDAE) of the Old World. They are also abundantly represented in the Australian Region, to the southernmost limit of trees, where the Honey-eaters (MELIPHAGIDAE) and the Brush-tongued Lories (TRICHOGLOSSIDAE, now subfamily LORIINAE of PSITTACIDAE) constitute the most important pollinators of the numerous species of Eucalyptus. It is interesting to observe that in many parts of India where various species of Eucalyptus have been, rather too successfully, introduced, an indigenous member of the parrot family, namely our dainty little Lorikeet (*Coryllis vernalis*) has also become one of the most regular habitués of the flowers. Numerous passerine species - sunbirds, flower peckers, white-eyes, and the Hair-crested Drongo (*Dicrurus hottentottus*), are mainly responsible for pollinating Eucalyptus flowers in India.

A classic example of the narrow symbiosis that may exist between highly specialized bird-flowers and their particular avian pollinators is provided by the sunbird *Cinnyris osea* and the plant parasite *Loranthus acaciae* in Palestine. The northern distributional limit of the family NECTARINIIDAE - latitude 30 deg. N. - corresponds more or less exactly with that of some of the most highly organised ornithophilous plants. Of these, the parasitic mistletoe genus *Loranthus* is dependent predominantly upon sunbirds for the fertilization of its flowers. The only region in Asia above lat. 30 deg. N. where a member of the NECTARINIIDAE occurs is the Dead Sea area of Palestine. Coincidentally with its pollinator, this only member of the genus *Loranthus* also transgresses its northern limit, completely overlapping the extra-limital extrusion of the sunbird.

Within the Indian subregion the parasitic mistletoe family LORANTHACEAE is one that is almost wholly dependent on the good offices of birds, both for the fertilization of its flowers (at least in all the species studied) and on the dispersal of its seed, as I mentioned earlier on.

One of the commonest Indian species, which has been somewhat better studied than the rest is *Loranthus longiflorus* Desr. which infests a wide range of host trees, some of them of great economic value. Its slender sickle-shaped tubular flowers show the most highly organized ornithophilous adaptations. They are about 4 cm. in length, and of a colour ranging from creamy white to bright scarlet. In shape and size they form a perfect sheath or scabbard for the sunbird's bill, and they contain a plentiful supply of a colourless, sweet, watery liquid which the sunbirds find irresistible. The stamens and style are so placed that during the sunbird's attempts to reach the nectar pollination is unavoidable. Moreover, the pollen grains are equipped with tiny wing-like processes which facilitate their clinging between the barbules of the bird's feathers. Above all else, however, is the fact that the flowers are of the most highly specialized ornithophilous type termed "explosive flowers". The mature buds remain closed unless and until the necessary extraneous pressure is exerted on their tips to spring them open. The sunbird in its quest hops from one cluster of blossoms to another tweaking the tips of the mature buds in its mandibles to spring them open before thrusting in its bill for the nectar. Experiments by covering bunches of buds with wire gauze,

Through binoculars one may sometimes observe this slender worm-like tongue rapidly shooting in and out in a curiously snake-like manner while the bird is feeding at a flower.

In the second line of Indian nectar-eaters come the White-eyes (ZOSTEROPIDAE) and the Flowerpeckers (DICAIEIDAE) whose tongues show intermediate stages of this specialization. In Zosterops the tongue is not tubular nor markedly extensile. It is openly channelled and ends in two brushes of bristle-like papillae which help to mop up the nectar. In most of the DICAIEIDAE the channelled tongue ends in bifurcated half-tubes which also seem to be well adapted for nectar-eating.

Both flower-birds and bird-flowers reach their highest development as regards numbers and organization in the tropics, though they are not confined to them. The most highly organized nectar-eating families are the Humming birds (TROCHILIDAE) and Sugarbirds (COEREIDAE) of tropical America, and the Sunbirds (NECTARINIIDAE), Flowerpeckers (DICAIEIDAE), White-eyes (ZOSTEROPIDAE) and Chloropses (IRENIDAE) of the Old World. They are also abundantly represented in the Australian Region, to the southernmost limit of trees, where the Honey-eaters (MELIPHAGIDAE) and the Brush-tongued Lories (TRICHOGLOSSIDAE, now subfamily LORIINAE of PSITTACIDAE) constitute the most important pollinators of the numerous species of Eucalyptus. It is interesting to observe that in many parts of India where various species of Eucalyptus have been, rather too successfully, introduced, an indigenous member of the parrot family, namely our dainty little Lorikeet (*Coryllis vernalis*) has also become one of the most regular habitués of the flowers. Numerous passerine species - sunbirds, flower peckers, white-eyes, and the Hair-crested Drongo (*Dicrurus hottentottus*), are mainly responsible for pollinating Eucalyptus flowers in India.

A classic example of the narrow symbiosis that may exist between highly specialized bird-flowers and their particular avian pollinators is provided by the sunbird *Cinnyris osea* and the plant parasite *Loranthus acaciae* in Palestine. The northern distributional limit of the family NECTARINIIDAE - latitude 30 deg. N. - corresponds more or less exactly with that of some of the most highly organised ornithophilous plants. Of these, the parasitic mistletoe genus *Loranthus* is dependent predominantly upon sunbirds for the fertilization of its flowers. The only region in Asia above lat. 30 deg. N. where a member of the NECTARINIIDAE occurs is the Dead Sea area of Palestine. Coincidentally with its pollinator, this only member of the genus *Loranthus* also transgresses its northern limit, completely overlapping the extra-limital extrusion of the sunbird.

Within the Indian subregion the parasitic mistletoe family LORANTHACEAE is one that is almost wholly dependent on the good offices of birds, both for the fertilization of its flowers (at least in all the species studied) and on the dispersal of its seed, as I mentioned earlier on.

One of the commonest Indian species, which has been somewhat better studied than the rest is *Loranthus longiflorus* Desr. which infests a wide range of host trees, some of them of great economic value. Its slender sickle-shaped tubular flowers show the most highly organized ornithophilous adaptations. They are about 4 cm. in length, and of a colour ranging from creamy white to bright scarlet. In shape and size they form a perfect sheath or scabbard for the sunbird's bill, and they contain a plentiful supply of a colourless, sweet, watery liquid which the sunbirds find irresistible. The stamens and style are so placed that during the sunbird's attempts to reach the nectar pollination is unavoidable. Moreover, the pollen grains are equipped with tiny wing-like processes which facilitate their clinging between the barbules of the bird's feathers. Above all else, however, is the fact that the flowers are of the most highly specialized ornithophilous type termed "explosive flowers". The mature buds remain closed unless and until the necessary extraneous pressure is exerted on their tips to spring them open. The sunbird in its quest hops from one cluster of blossoms to another tweaking the tips of the mature buds in its mandibles to spring them open before thrusting in its bill for the nectar. Experiments by covering bunches of buds with wire gauze, permitting access of the normally attendant insects but denying it to the

the birds, have proved that the buds will remain closed and wither away without the help of sunbirds and flowerpeckers.

While the *Loranthus* is an example of the most highly specialized bird-flowers we have in the Indian Region, there are a great many other and unrelated species that show these special adaptations in varying degree, and which are largely, though not exclusively, fertilized by birds. Amongst the most spectacular of these are certainly the gorgeous rosy red and scarlet blossoms of the Silk-cotton, Flame-of-the-Forest and Coral trees (*Salmaia malabarica*, *Butea monosperma*, and *Erythrina indica* with its allied species such as *lithosperma* and *suberosa*). When in full blossom during the dry season, February to April, they light up the parched and drab landscape with patches of brilliant flame, scarlet and crimson, which stand out conspicuously for miles around. The trees attract almost every species of arboreal bird of the surrounding countryside and present a lively scene of riot and revelry. The branches rock and sway as the thirsty visitors hop from flower to flower throughout the livelong day and help themselves to Nature's bounty. Incidentally, these trees when in flower offer the most rewarding venues for the bird watcher. The flower-laden branches become a kaleidoscope of the local bird life, and the fact that the trees are bare and leafless at this period adds greatly to the facility and enjoyment of observing the manners and social graces - or lack of them - of the visitors. I would recommend its potentialities also to members of the Malayan Nature Society, especially to the botanically minded ornithologists among you.

Some Birds Around Badrinath (I):

Those of our members who might have occasion to visit the sacred shrine of Badrinath in the Garhwal Himalayas, might well include a day's visit to the Vasudhara Falls some seven miles further up the valley overlooking the confluence of two great glaciers which are the birthplace of the great Alaknanda Ganga which flows past the holy settlement, and then continues as the great river which has carved out an incredible gorge right through the heart of the greatest mountains of the world, and accentuates their superb heights by the great depth of the chasms.

After completing all the rites which the scriptures ordain of the pilgrim to Badrinath, a quiet day spent on the green turf above the settlement in the shadow of the sublime Nilkanth mountain, or around the small glacier gouged lakes and boulders behind the Government rest house on the far side of the river is a rewarding period spent seeing new and beautiful birds among magnificent surroundings of towering mountain slopes disappearing into the whirling clouds above.

The binoculars scanning the writhing mists sweeping past these crags and along the snow filled gullies will reveal frowning cliffs hemming glaciers and waterfalls cascading down to the foot of the cliffs. This awe inspiring world high above at first glance seems desolate of all life but reveals on a second scrutiny a world well populated with birds: vultures and lammergeiers serenely sailing past on broad unbending wings, or rising with great speed up the rock faces on updrafts of warm moist air, to loose themselves into the billowing vapours: while the most striking of the denizens of this precipitous setting are the two species of Choughs. Their crow-like forms wheeling and diving with remarkable precision are as small black birds and with no other indication as to what they actually are. They are birds truly of the great mountains and revel in the harsh precipices of the higher Himalayas, which is their home.

But it is lower down that one sees intimately the high altitude birds, peculiar to the Himalayas. Along the swirling waters of the Alakananda as it sweeps past the bridge below the temple in milky white eddies, are the two Redstarts so typical of these fast flowing streams of the Himalayas. From a distance these birds, resemble our common Indian Robins in shape, especially the lovely Whitecapped Redstart. It is black all over, with a rich

rich rufous lower breast, abdomen and tail. The tail is raised over the back, and then lowered down to the rock on which the bird is perched, and then rapidly raised and depressed several times. The most arresting thing about this Redstart is the glistening white cap contrasting vividly with the black head and upper plumage. During my visit in early June, the birds were busy rearing their broods, and one pair had taken up residence right inside the temple courtyard under the beams of a corridor which was used for sermons in the day and Kirtans at night, and was brightly lit by gas lamps. The birds went about their household chores of rearing a hungry family over the heads of hundreds of devotees, perching at times not more than a foot above singing heads before flying up into its nest. It was a wonderful example of how a bird of the wildest rivers trustingly accepts man where the latter's destructive propensities are subdued temporarily by needs of the spirit.

Going back to the bridge, and looking over onto the wet spray splattered boulders, the birdwatcher will notice the second Redstart which is a familiar sight on all the Himalayan waters from about three thousand feet up to almost the edges of the snow. This is the Plumbeous Redstart a bird remarkable in the fact that the two sexes are so different in colouration that they might be mistaken for totally different birds. They are small and look very round and cosy and I would add totally out of place along the roaring cascades where they make their homes. Here they will be seen flying from one boulder to another in a peculiar whirring flight uttering a penetrating trill which carries to a remarkable degree over the thunder of the waters. As they land, there is much wagging of the tail which is spread into a fan and closed at the same time, making it a most expressive and characteristic organ even among the Redstarts who as a genus specialise in mobile tails. The male is a dark plumbeous grey bird, with a fully chestnut-red tail. His little spouse is brownish grey with a brown tail flashing white on the outer edges as the organ is wagged and expanded. Both these Redstarts are water birds and never found far from running water and they catch their prey in sorties over the swirling floods and among the fine spray rising above the frothing cascades.

The Himalayan Whistling Thrush is another bird closely wedded to the great water courses of the Himalayas, and is a common bird at all altitudes from the foothills to the snowline. Its rambling tunes of tinny whistling carry above the thunder of the rivers, and is a delicate thread of song woven into the Himalayan orchestra of thundering rivers. The Whistling Thrush is slightly larger than a myna, and very much more leggy, with a deep black plumage which glistens in the sun a bright blue on the head and blue spots on the wing-coverts. The beak is a pale yellow. This thrush is not by any means limited to the edges of rivers and torrents, but is found almost everywhere, on grassy slopes, in forests and among cultivation, but invariably its territory is centered around some water, be it as insignificant as a seeping mossy overhand under which it might build its bulky nest of mosses and vegetation, tucked well away from any possible interference.

Another attractive little bird along the Alakananda at Badrinath is the Little Forktail, a small pied bird, about the size of a sparrow, with a white V on its back, a large white spot on its forehead and a white V opening and closing as the bird expands and closes its tail much in the manner of the Plumbeous Redstart. It is remarkable how this little trait of the charming bird camouflages to merging it into the sparkle of water and wet rocks upon which the bird lives its frail life. The Brown Dipper is sure to impress itself on an observer, though at this time of the year, it is less seen on the main river where the water is sullied by melting snow, and is more confined to the clear side streams. It is about the size of a Brahminy Myna, and is chocolate brown all over. Its stumpy tail is held cocked up, and the bird has an amusing habit of dipping on its legs, as it perches on a rock apraising the observer critically. If no movement is made, the dumpy little creature soon loses interest and turns to the more important work of procuring a meal. This it does by plunging into the eddying water, straight to the bottom, where if the water is clear, it can be seen walking on the floor against the current. It remains submerged thus, for quite some time before buoyantly bobbing up onto the surface either to dive

dive again, or to scramble onto a nearby rock. This suicidal feat of the little bird has always been rather alarming to watch, and I have never failed to wonder at the way the bird is to withstand all that buffeting for an entire lifetime, but it certainly receives no ill effects as is apparent from its fast and whirling flight along the water courses dodging in and out of the rocks to find some other suitable eddy to dive into.

The birds along the water at Badrinath are restricted in species on account of the inflexible ecology, and the rather specialised method of feeding required, but the birds are an unfailingly attractive group to watch. They are also of interest, as they are so typically Himalayan, and above all there is something irresistible in the way they lead their lives along the dangerous rivers and among the perpetual roar and thunder of the waters cascading down those breathtaking gorges. (To be continued....)

K.S. Lavkumar, Rajkot.

BIRD WATCHING IN TERRAI

Salim Ali had planned to visit Rudrapur in the first week of July to study the habits of the largebilled Weaver Birds (Finn's Baya) which were reported to be nesting there and I accompanied him for a few days. We left Bombay by train on the 4th and spent the next evening at Mathura looking for birds along the banks of Jamuna. The place was lined with holy men all very massive and we saw very little in the way of birds. But we saw a Green Sandpiper, the first migrant of the season. The squelchy mud alongside the bank of the river suggested that it would attract a large number of birds in the cold weather.

The next morning found us at Kichha, a station between Bareilly and Kathgodam. We were picked up there by our host Mr. C.M. Chaudhri, a Retired Chief Conservator of Forests from Orissa who took us to his sugarcane farm about 20 miles away. This was to be our Bird-watching venue for the next three days. From here we could see the Bhabar country and the blue hills of Naini Tal. The farm about 350 acres in extent was covered with tall grass and reeds of various kinds typical of the terai region. The commonest of these were Munj, Bajheri, Kans and Patera (Bullrush). The best way of proceeding over this terrain was on elephant back and we made full use of the elephant on the farm. From the back of the animal, we got a splendid view of the country-side and saw many birds in the distance which would, otherwise, have escaped us. With Salim Ali's assistance, I managed to make a list of 85 species of birds, seen or heard on the farm itself. There are quite a number of birds which I saw for the first time. The Yellowbellied Wren-Warbler (*Prinia flaviventus*) was one of the most attractive of this category. The bird had all the elegance and grace of the Common Ashy Wren-Warbler with the added advantage of having a more colourful apparel. It has an ashy blackish head, yellow underparts and a comparatively long tail which it uses to brace itself against the stem of the reed on which it is perched. The Yellow headed Fantail Warbler (*Cisticola exilis*) recorded for the first time in Kumaon a few years ago, and seemed to be not uncommon, was also seen. On one occasion its loud and agitated calling from a reed clump suggested that its nest was close at hand. We searched for it in vain. We managed to get a glimpse of the Greyheaded Fishing Eagle (*Ichthyophaga*) sitting on a distant Bombax tree over a stream.

An exciting feature of this area from the bird-watcher's point of view is that several allied species of birds are found here so that they can be compared side by side and their differences in appearance and behaviour properly noted. For instance, 3 species of weaver birds - the Common Baya, the Striated Weaver Bird and the Blackthroated Weaver Bird - were nesting side by side on the farm. The nests of the Common Baya suspended from trees, were the neatest of all; the nests of the Striated Weaver Bird were the smallest and least well-finished; the helmet at the top is not properly rounded in fact it is very angular and the entrance tube is much shorter than that of the common bay -

common baya - almost absent. The workmanship of the Blackthroated weaver Bird is midway between the other two. The dome of the nest is fairly well rounded and it is attached more neatly to the stems of grass or the twig of a tree, than that of the striated weaver bird. Both the latter nests are attached by the dome directly to reeds and bulrushes in swamps, and do not swing freely like the Baya's. Unfortunately, I could not proceed to Rudrapur with Salim Ali to see the largebilled weaver birds. But seeing even these three species together was a rewarding experience. There were also four different species of mynas on the farm. The Pied Myna was the most numerous, but the Common Myna, the Bank Myna and the Jungle Myna were fairly common. We saw four species of Kingfishers. Pied Kingfishers were hovering and diving over a nullah, the Little Kingfisher was darting along in its usual businesslike manner, the Whitebreasted Kingfishers were trilling away from various corners apparently having more leisure on their hands than the other Kingfishers around. We heard the deep croak of the Storkbilled Kingfisher, but were unable to see it.

Throughout the day we could listen to the calls of birds seated comfortably in the verandah of the farm house. The loud calls of the Black Partridge which our host described as resembling: "Noon Mirch Adrak", the agitated calls of the Red Wottled Lapwings obviously guarding their eggs and nests, the chorus of weaver birds, the tireless "Qwak Qwaking" of Whitebreasted Water Hens, the chattering of mynas, the rasping notes of the Black Drongo, the loud appeals of the Piedcrested Cuckoo and the music of Orioles, was always in the air. We left the farm in the morning of the 9th after spending a wonderful holiday. My only disappointment was that we had not seen a tiger. These beasts are frequent visitors to the farm and our host showed us a few damp and shady spots, where they occasionally have their afternoon siesta. However, not having come across tigers on the premises, also has its advantages.

Zafar Futehally

NOTES AND OBSERVATIONS

The Goldenbacked Woodpecker Using the Resinous Sap of the Mango Tree:

During the past 4 years I have observed a curious habit in the Goldenbacked Woodpecker (*Dinopium benghalense*) at Chittur-Cochin. This bird is found, off and on, removing a few square inches of bark from the trunk or a thick vertical branch of a particular mango tree and rubbing the fresh sap into the middle of its back. This practice is seen only during a short period. When there is a shower after a warm spell, I expect to see one or two woodpeckers on the tree indulging in this habit - and am seldom disappointed!

It is interesting to recall in this connection, a note on the Heartspotted Woodpecker by Salim Ali (The Ornithology of Travancore and Cochin: J.B.N.H.S. XXXVIII, Page 786): "Davison has drawn attention to the bristly tufts of feathers borne on the middle of the lower back by both sexes, which are clotted by a gummy substance that emits a strong resinous odour. The use of this tuft and the nature of the glands producing this viscid matter is unknown."

It is quite likely that the resinous substance found on the back plumes of the Heartspotted Woodpecker owe their origin to a tree and not to any gland within the bird. I hope Dr. Salim Ali will give us his comments on this, and let us know also whether he got any report on his specimen of the Heartspotted Woodpecker from Dr. Stresemann.

Dr. Salim Ali writes: "This is a most interesting observation. It is to be hoped that Mr. Neelakantan will follow it up and in due course be able to throw more light on the peculiar behaviour described. So far the curious resin-clotted tuft of feathers on the back seems to have been recorded, and unfailingly observed, only in the Heartspotted Woodpecker (*Hemicircus canente*). The skinned bodies sent to Prof. E. Stresemann several years ago, unfortunately proved unsuitable for the specific morphological study. Thus

Thus the question whether any special glands of the skin are involved in the production of the clotting substance or not must remain open. But, as Mr. Neelakantan suggests, the clotting may actually be due to tree resin and not to any glandular exudation at all. The nature of the gummy substance in the case of the Heartspotted Woodpecker and its odour, together with the observation now recorded - albeit in a different species - certainly supports the possibility" - Eds.

A Brahminy Kite's Attempt to Feed on Vampire Bats:

On 9th March, 1959, at 8.30 a.m., I went out to investigate what appeared to be the notes of a strange bird, and found that the notes were being uttered by a leaf-nosed bat struggling in the clutches of an adult Brahminy Kite! The bat was struggling desperately, trying to scratch the kite with the claws of the wing that was free. The kite, which had alighted on a tree, was also flapping its wings. A couple of Jungle Crows drove the kite about from tree to tree. For ten minutes I heard the squeaking of the bat. As the kite had moved out of sight, I could not find out whether it did kill and eat the bat.

Nineteen days later, at 10 a.m., the excited calls of squirrels, crows and babblers again drew my attention to a Brahminy Kite which was being mobbed by crows. A few moments after I had reached the scene, I saw a bat being pursued by a Jungle Crow. It was a leaf-nosed bat, and had a young one clinging to its belly. I had to climb a wall to see what followed and saw a crow on the ground pecking the young bat to death and flying off with it. There was no sign of the adult bat.

At that time the Brahminy Kite as well as the Jungle Crow had young in the nest and the attempt on bats was presumably due to the growing demand for larger prey than crabs and frogs!

Prof. K.K. Neelakantan
Govt. College, CHITTUR (Kerala)

Birds using Tools:

There are very few examples of birds using tools. The Woodpecker Finch (*Camorhynchus pallidus*) of the Galapagos Islands is insectivorous, but possesses a short stout beak. Lacking the long barbed tongue of the woodpeckers, it uses a thorn or twig to pry insects out of crevices. Another example is the Bower Bird (*Ptilonorhynchus violaceus*) which uses fruits for staining the stems in its bower.

I have an African Grey Parrot. This bird has not been taught any tricks nor even is he tame enough to be taken out of his cage on the hand. This parrot uses "gowar" pods to scratch himself on the head and neck. He does this quite deliberately and carefully. Parrots are intelligent birds and it would be interesting to hear of other accounts of "tool" using parrots and other birds from our readers.

Y.S. Shivraj Kumar, JASDAN.

A Bird Medley:

Sitting out in the garden about 6.15 p.m. on October 10th 1960 I noticed a considerable number of birds very active on and round the stem of a Coconut tree (*Cocos nucifera*), of which there are three in the garden, planted by my grandfather before 1890. They are very thin tall and old, with holes containing nests in the trunk high up. There was considerable fuss round two such small holes, and at first I thought it was two Brahminy Mynas (*Sturnus pagodarum*) being mobbed by various other species.

Through my binoculars I could see four or five little Chestnutbellied Nuthatches (Sitta castanea) flitting up and down the bark close to the two holes, very excited. A set of Common Babblers (Turdoides caudatus) joined the gathering. I then noticed two Goldenbacked Woodpeckers (Dinopium benghalense) on the stem of the tree. They are afraid of no birds, and chased the babblers away. Black Drongos (Dicrurus adsimilis), who cannot resist pestering anything on the wing, hovered about a foot from the hole, and chased the other birds.

I became very intrigued with this medley, and approached quietly to within about fifteen yards, and then saw inside one of the holes the red top-knot of a Goldenbacked Woodpecker. At first sight the hole did not appear to be big enough for the entry of a bird of this size. I could not tell whether it was a fledgeling or an adult, as it withdrew it's head each time another bird approached. The chief claimants appeared to be a pair of Brahminy Mynas, but the little nuthatches were very persistent, and did not move far away from the hole. Some Common Mynas (Acridotheres tris) were also in the melee, and a couple of lumbering House Crows (Corvus splendens) took a cursory interest for a few minutes.

The most persistent members of the argument were the woodpeckers, Brahminy Mynas and the little nuthatches. I watched for about half an hour or so, and the activity continued unabated. This evening sitting in the same place at the same hour, I saw no birds approach the tree (June 12th.), and the two holes seem to be completely unoccupied, much to my disappointment. I still have not discovered who was the owner of the nest in the hole.

J.H.H. Peppe
Birdpur Estate, U.P.

Buzzard Attacking Cormorant:

On a reservoir in the Birdpur Estate, now the property of the U.P. Government, I noticed a White-eyed Buzzard (Buteo teesa) stooping on what apparently was an injured bird, from about 15 to 20 feet up. The bird was diving, and swimming quite long distances under water. The Buzzard could evidently see it under water, as its stoops anticipated the other breaking surface. However it dived too quickly to be caught. After stooping six or eight times the Buzzard cruised quietly away.

The bird surfaced properly, and I could see distinctly through my binoculars that it was the Little Cormorant (Phalacrocorax niger). A few minutes later a Brahminy Kite (Haliastur indus) sailed quietly over the scared cormorant, which immediately dived, but the kite took no notice.

I have never seen a White-eyed Buzzard operating over water before, and feel that it was merely indulging in a little bullying for fun. This Buzzard is the commonest of the Hawks in this locality, and its "Wolf Call" cry very distinctive, as well as the white nuchal patch at the back of its head.

J.H.H. Peppe
Birdpur Estate, U.P.

WANTED: Helpers for BIRD STUDY CAMPS in SEPTEMBER 1961.

Readers of these Newsletters must be aware that since September 1959, Dr. Salim Ali has been organising study camps in various parts of India, to study bird migration, as well as to find out if birds are possible carriers of any virus diseases. These investigations are being financed by grants received from the W.H.O. and the Rockefeller Foundation. The next camps are now being planned for September 1961 and they will probably be established in Saurashtra and Kutch, as well as in north India.

Life in these camps are a stimulating experience for persons interested in birds. One gets the rare opportunity of handling scores of birds and studying them closely. There is a great deal of work to be done, like putting up nets, removing the birds which are caught, taking them to camp, weighing and ringing them, measuring the length of the wings, and recording the data.

Persons interested in joining these camps are requested to write immediately to Dr. Salim Ali, 33 Pali Hill, Bandra, Bombay 50.

CORRESPONDENCE:

"May I suggest the publication of a complete list of persons interested in bird watching, so that those of a particular state or region might learn of one another's existence?"

K.K. Neelakantan
Professor, Govt. College, Chittur.

"I am most interested in the bird notes and I do hope you will continue to send them to me; in case any subscription has to be paid please let me know. One other friend of mine is also interested and I am giving you his address: Lt. Col. Granville, The Vicarage, Pachmarhi, M.P."

M.K. Fatehsinhji, Kutch.

".....It is raining hard down here. Bird watching is almost impossible in this season. Floods and storms, you see. One of these days I may send a short note on "Bird Watching in the Rains".

Even in these heavy rains Tree pies, Chloropsis orioles, Small Green Barbets and a hoard of other bold birds venture out. Our place is sort of a hilly one with big forests all around us."

M. Sasikumaran
Vadakancheri - Cochin.

" Indeed, the idea of establishing an Ornithological Society in India, is appreciable. No doubt it will be a successful society comprising many bird-lovers in India.

But I don't know whether the society should be open to all 'Bird-Lovers', who might send false, I mean, non-scientific, information regarding birds and bird-life. If you never mind, Sir, I urge that the society should welcome only scientific informations and reasonable observations. Yes, I know this is a difficult task that cannot be done to start with.

Regarding the magazine of the society, I don't know whether you want it to be either purely technical, popular or a combination of the two. I think the last will be suitable as it attracts both the kinds of people."

C. Nandini
Durgigudi, SHIMOGA.

"I am spending these days in field work aiming at the identification of local birds. I think that your news bulletin may help me in my pursuit of bird study."

GEORGE P.V.
Kerala.

"In the News Letter for June, No. 7 Mr. P.W. Soman gave a very interesting note on 'Sunbirds Flycatching'. He mentions the name as "Nectarinia asiatica". On trying to identify which species he was referring to I could not find this name either in Whistler's Popular Handbook of India Birds, nor in Salim Ali's book. The name used in these for the various species of Sunbirds is 'Cinnyris' (purple)-asiaticus; (lotens)- lotenia; (purplerumped)-zeylonicus; (small)-minima. The yellowbacked sunbird being Aethopyga siparaja. *

In the British Encyclopaedia (not Britannica) Sunbirds are said to be in the family of 'Nectariniidae', also in Whistler, but I cannot find any mention of the species name of 'Nectarinia'. I have been wondering what system of taxonomy it is in. Evidently the names Nectarinia and Cinnyris are more or less synonymous, so I assume that the one mentioned by Mr. Soman is the Purple Sunbird. It is far the commonest round here, and I have often watched them, but never noticed this form of activity."

J.H.H. Peppe
Birdpur Estate, U.P.

* All names have been reviewed up-to-date in the Synopsis of the Birds of India and Pakistan. Also in the 6th Edition of Book of Indian Birds of which a notice appeared in the last Newsletter.- Ed.

"I have been finding the Newsletters most interesting and informative. As I am immensely interested in birds and as we have a fairly good collection of South Indian birds in this Museum, I shall be most happy to continue receiving your interesting Newsletters."

S.Thomas Satyamurti
Superintendent,
Govt. Museum, Egmore,
MADRAS-8.

"During the period I was at Navapura, a small village, about six miles north-west of Rajpipla and three miles south of the Narbada river, I could mark consecutively for two years the regularity of migration of the Blue Rock Thrush (Monticola solitarius). I saw a female bird first on 4.10.54 at Navapura. It was sitting on a dilapidated building when I first caught sight of it. Its peculiar habit of dipping the head and nervously flitting the tail every now and then attracted attention. Next year I saw the bird, again a female, at the same old building on 2.10.55. It is just possible that I might have seen it a couple of days after its arrival on the first occasion."

Lalsinh M. Raol, Rajkot.

Zafar Futehally,
Juhu Lane,
Andheri,
BOMBAY 58.

BIRDS AT THE NAJAFGARH JHEEL

On 28 May 1961 I went to Najafgarh (jheel) alone. The place was full of water. I had never seen as much water in May. After some time I noticed some Stilts sitting on tiny grass-covered mounds rising a little above the water. The distance was about 150-200 yards from land. I felt sure they were nesting. I persuaded two small boys to wade to these islands and see if there were any eggs. The first mound that they visited held only a nest, and they refused to go further and came back. I took courage and persuaded them to accompany me, promising a reward. We waded through knee-deep water and found the first nest where I had seen a pair busy building it. The nest consisted of a few weeds, strands and leaves of a creeper (water creeper which in Hindi is called Nari), and was very damp. The next nest was still further on. It was on a tiny grass-covered mound. The nest was similar, of a few strands and leaves of the Nari and a few other weeds and vegetable muck. There were three eggs which were very similar to Redwattled Lapwing's eggs in size, shape, and colour. I found another nest with a solitary egg. I saw three more nests in the distance, but as it was getting dark I did not venture further. I may add that the stilts were extremely agitated and were making a terrific din. One was actually making a 'broken wing' posture on the water while I was examining the eggs. It was a thrilling moment for me for, as far as I know, nests of stilts have never been reported from Najafgarh Jheel. The Sultanpur Salt Works nests, which Lowther photographed in 1923, were of a different type, built on the ground with tiny pieces of limestone.

On the 23rd of July (1961) I visited Najafgarh Jheel again. I found the waters had been drained to a very great extent and fields of maize and sugarcane were doing very well on the drained land. Even with all this draining the place was teeming with birds. I saw more than 70 Sarus Cranes. Why so many had congregated there I do not know. Apart from sarus, I saw Adjutant, Black-necked, Whitenecked and Painted Storks, Spoonbills, White and Glossy Ibises, Purple and Grey Herons, egrets of three kinds, and Pond Herons. I also saw 200-300 Blacktailed Godwits. I have never seen them at this time of the year before. They were probably on passage to further south. There were masses of Pheasant-tailed Jacanas; Purple Moorhens were a-plenty, and Spotbills by the score. Garganey Teal were already back (I counted more than 50), Greenshank, Wood, Green, and Marsh Sandpipers were there in small number and in the far distance I could see very large white birds which were either pelicans or flamingos. They were beyond the range of my binoculars. Something must be done to turn Najafgarh into a bird sanctuary. The jheel has been there for such a long time. Hume mentions it in his writings. The place is not only a paradise for water birds, but the greatest variety of Raptorial birds is to be found here. I have seen 7 kinds of eagles, apart from buzzards, harriers, and falcons. All kinds of larks, pipits, and wheatears are found here in winter. Some of the larks breed here, as also do the Purple Moorhen, Jacana and Purple Heron. I am sure the waters and reeds harbour many other kinds of water birds -- rails, crakes, and several kinds of warblers, etc.

(Mrs.) Usha Ganguli, Delhi

FIELD IDENTIFICATION OF SOME MIGRATORY 'SONG BIRDS'

Participants in the BNHS/WHO Bird Migration Study Project often find difficulty in identifying in the field certain small passerine birds without authentic preserved skins for comparison. Since correct identification is essential for the proper recording of all birds ringed, as well as for the study of ectoparasites collected from them, it is thought that the publication of a few simple diagnoses in the Newsletter may prove helpful up to a point -- also to bird watchers in general. Among the migratory birds captured during our last four field sessions in Kutch and Saurashtra, whose identification sometimes gave trouble, were the wagtails, warblers, robins, and chats. These groups of migratory passerines, due to their habit of running about and feeding on the ground, or of descending to it or into low bushes to pick up insects, are susceptible to infestation by ticks resting in the grass or low herbage. For this reason such species are considered of special significance in the investigation of the role of birds in the dissemination of arthropod-borne viruses.

In this Newsletter a beginning is made with the group of wagtails in whose plumage yellow predominates. The black and white wagtails, and the commoner species of larks, pipits, warblers and others will follow.

Subspecies of individual examples of wagtails are often impossible to determine with certainty even from museum skins in breeding plumage; in the field it would be rash and of doubtful scientific value to attempt to do so, more particularly in winter plumage in which the great majority of autumn immigrants are likely to be encountered. However, where proper regional ornithological surveys have been carried out, and reports published on the basis of the collected material (as in the case of Gujarat, for instance) it may be permissible (though not desirable) to assume the subspecific status of a bird obtained.

* * * *

The Yellowheaded Wagtail (Motacilla citreola) is represented in our area by two very distinct wintering races, viz. the Blackbacked and the Greybacked, the former commonly breeding in the western Himalayas.

BLACKBACKED YELLOWHEADED WAGTAIL (Motacilla c. calcarata)

Adult MALE (S u m m e r): Back black. Edges of wing-coverts tinged yellow. Head, face, and underparts bright yellow.

(This, the breeding plumage, is increasingly in evidence after about end February, preparatory to emigration.)

Adult MALE (W i n t e r): Back dark greyish brown, frequently intermixed with a variable amount of blackish feathers. Yellow of head and underparts duller. No black hind collar as in citreola, but occasionally some blackish feathers near nape which generally extend also to mantle.

Adult FEMALE (S u m m e r): Similar to adult male in winter plumage, with bright canary yellow underparts, supercilia, and tinge on forehead.

Distinguished from female citreola by blacker upper tail-coverts.

Adult FEMALE (W i n t e r): Differs from winter male by absence of yellow forehead (though yellow supercilium present), so that whole head is dark olive with a yellow tinge. Lores, cheeks, and ear-coverts yellowish olive instead of yellow. No black feathers inter-

mixed on upper parts. Under parts yellow as in male.

Distinguished from female citreola by rather darker upper parts and ear-coverts, and much brighter yellow supercilium and under parts.

1st winter SUB-ADULTS: Back grey-brown with little or no black in upper plumage. Under parts yellowish white.

GREYBACKED YELLOWHEADED WAGTAIL (Motacilla c. citreola)

Adult MALE (S u m m e r): Back grey with a black hind collar. Edges of wing-coverts white. Head, face, and underparts bright yellow.

Sub-adult MALE (S u m m e r): Yellow of head confined to forehead. Broad yellow supercilium from base of bill to beyond ear-coverts. Rest of head brown or olive-brown, tinged with yellow. No black hind collar. Under parts bright yellow as in adult.

Adult MALE (W i n t e r): More or less as in summer plumage, but back pale greyish brown with no intermixture of blackish feathers. Black hind collar less prominent. Head usually less pure yellow, sullied with dark feathers on crown.

Adult FEMALE (S u m m e r): Lacks the pure grey back and black hind collar of male. Upper parts greyish brown. Forehead, supercilia, and most of ear-coverts yellow. Under parts bright yellow as in male.

Adult FEMALE (W i n t e r) & sub-adults BOTH SEXES: Upper parts greyish brown. Yellow of head confined to supercilia. Cheeks and ear-coverts dusky yellow. Under parts whitish excepting chin and throat which always yellow, as is sometimes also middle of belly. A pectoral band of dusky spots in some examples.

Distinguished from Blueheaded Wagtail in winter by presence of yellow supercilium, yellow-tinged ear-coverts, and absence of greenish tinge on upper parts.

N.B. In all seasons, and at all ages, Yellowheaded Wagtails (Motacilla citreola) may be distinguished from Yellow Wagtails (M. flava) by the presence of broad yellow supercilia (eyebrows) and more or less yellow forehead.

Many of the yellow wagtails of the flava complex are amongst the most difficult to identify since the plumage of the sexes in the breeding as well as non-breeding seasons is different. To add to the confusion there is also considerable variation in the sub-adult plumages during the first two years of age. Under these circumstances field identification of sub-adult winter birds is largely a matter of guess-work and, as such, far from satisfactory. Where guess-work has been employed, this should always be indicated in the record by a question mark after the name.

TURKESTAN BLACKHEADED WAGTAIL (Motacilla flava melanogriseus)

Adult MALE (S u m m e r): Upper parts olive-green. Head (including crown, nape, and ear-coverts) jet black. No supercilium. Chin and moustachial stripe white. Under parts bright yellow.

Adult FEMALE (S u m m e r): Upper plumage brownish grey tinged with olive-green. Crown blackish. Faint trace of pale supercilium behind eye. Under parts yellowish white, yellower on belly and under tail-coverts, frequently with dusky spots on breast.

BOTH SEXES (W i n t e r): Duller editions of their summer plumage. Head in male dark slate; in female without blackish tinge.

the rest of the plumage of the male is mostly blackish and

pasture land, etc. often in attendance on grazing cattle. Among mixed scattered flocks of Blueheaded and Greyheaded Yellow Wag-tails.

BLUEHEADED WAGTAIL (Motacilla flava beema)

Adult MALE (S u m m e r): Distinct and unconfusable. Above: Bright olive-green. Head pale french grey with prominent white supercilia and moustachial stripes, and pale grey-and-white ear-coverts. Below: Chin and throat white; rest bright yellow.

Adult FEMALE (S u m m e r): Above: Olive-brown, except head which lacks the olive tinge. Pronounced white supercilia. Ear-coverts brown-and-white. Distinguished from female Greyheaded Wagtail by paler ear-coverts and lores, and prominent white supercilia. Below: Chin and throat yellowish white; rest yellow -- paler than in male.

BOTH SEXES (W i n t e r): Duller editions of their summer plumage.

GREYHEADED WAGTAIL (Motacilla f. thunbergi)

Adult MALE (S u m m e r): Above: Dull to bright olive-green. Head slaty grey. No supercilium. Blackish ear-coverts. Narrow white moustachial stripe. Below: Bright yellow.

Adult FEMALE (S u m m e r): Above: Dark olive-brown with greenish olive rump. Dark ear-coverts and lores. Faint whitish supercilium. Below: Bright yellow; pectoral region with dusky spots.

Distinguished from female Blueheaded Wagtail by darker ear-coverts and lores, and in possessing only an ill-defined whitish supercilium.

BOTH SEXES (W i n t e r): Duller editions of their summer plumage.

The only other fairly common wagtail with yellow in its plumage likely to be met with is the

EASTERN GREY WAGTAIL (Motacilla caspica cinerea)

Adult MALE (S u m m e r): Above: Blue-grey, with conspicuous white supercilia and moustachial stripes, and greenish yellow rump. Below: Chin and throat black; rest sulphur yellow, brightest on under tail-coverts.

Adult FEMALE (all seasons) & MALE (W i n t e r): As above, but with chin and throat white, occasionally dark-mottled in summer female.

The Grey Wagtail has a noticeably longer tail than the other yellow wagtails, with the outer feathers largely white.

Usually met with as a solitary bird in better wooded country, preferably hilly, along streams and trickles of water, and on forest roads and footpaths.

(To be continued)

Sálim Ali

/The above article by Dr. Sálim Ali is in response to a letter by K.S. Lavkumar, reproduced in the Correspondence Section. - Eds./

BIRD MIGRATION, BIRD INTELLIGENCE

Bird migration has been a fascinating problem, which has of late come to the forefront of research by scientists and inquiry by amateur bird students. It is indeed an incredible fact that so frail a set of beings like birds should be capable of such long and fast movements in the normal courses of their lives. The more one reads about migration, the greater is the wonder and admiration aroused. Many theories have been propounded and still others rejected, while the entire subject remains bordering on an enigma, softly explained as some force of instinct still poorly understood. The most amazing of the entire problem is the ability of navigation through the darkest nights and across trackless oceans and deserts. The entire thing certainly is one of the marvels of nature, and one into which a layman like myself should and do hesitate to plunge. But I cannot quite withstand the temptation to challenge the bone and dry scientists who tend to completely dehydrate birds, and for that matter all lower beings, into machines of instincts. I know birds and I have watched them in a variety of surroundings, and I can say without hesitation, that howsoever simple they might be, they do possess a sufficient degree of individuality and reason to make them distinct from automats controlled merely by instincts. Agreed that the extent of reason as in man is not to be attributed to birds, and that when things become extraordinary, or they are faced with problems of seeming dangerous magnitude, birds do react rather hastily in tune with their instincts which are the basic thought evolution for survival. Man even does so. What I contend is that under normal circumstances a bird can, if given time, adjust itself to its changed surroundings, and to that extent is a rational creature, though without the snap decisions of a human. But here pause a while; even in man the ability of snap decisions is acquired at the suppression of the basic instincts and often by training, this cannot be denied.

With this introduction, I will explain myself. The studies of ringed birds from sea bird colonies show that the young birds do not migrate south with their parents, or with other older birds of their own kind, but instead they show a marked dispersal, a sort of explosion into every direction - even north. Generally the longest dispersals are to the east or the west. Would this not suggest that the young birds finding the shortage of food, or finding temperatures becoming too cold, or for that matter, the shorter hours of daylight and stormy weather too uncomfortable to live in, decide to move (the decision might in the first instant be instinctive), and they do so with all the urgency of youth and inexperience and so place great distances between themselves and their parental home? Finding no improvement in a northern or latitudinal migration, they might well start south and so by a degree of trial and error establish their migratory movement. That they return to their parental home, is no more surprising when we analyse our own reactions when we approach home; this very impulse can underlie the urge for a northward flight and ultimately get the now mature bird back to its breeding haunts. In later years, the bird could again by intuition shorten its original flight line to get to its seasonal quarters by a more direct route. I would of course agree, that the general maintaining of direction on a dark night for an experienced and mature bird is as much a matter of instinct as it is for the men who live in the country to follow the right direction even after it is too dark to see landmarks, or for those crossing deserts where a subconscious adjusting of movements is quite apparent. It is only city people who are not using this instinct and who lose it and are surprised when fellowmen and for that matter humble animals like birds are able to move around without any navigational aids. Landfalls by the Polynesians in their great voyages across the uncharted Pacific could hardly be the result of very accurate navigation by stars or the sun. It is not quite so easy to keep a dead straight course without naviga-

tional aids, but it certainly is by the inner sense which is as much inexplicable in man as it is in birds.

Another point of debate is the punctuality of birds in their various activities, migration, nesting, etc. What triggers off migration? Here again I contend, it is the climatic factor, and the collective flight takes place when most of the birds feel the necessity to go, and so as in the case of the Rosy Pastor, they all start off in a reassuring flock. This is also seen in humans; how readily we are willing to travel if there is company and so why should this not be the case among the birds? After all it is always nice to have friends when on a long travel, which the migrations are. Then there is the talk of length of daylight effecting the gonads. I agree we all are influenced in mood and bodily function by our environment, but why single out the birds? Are humans not so influenced? While talking about length of daylight on breeding activities, I would like to comment, that birds with extensive altitudinal ranges in the Himalayas breed at different times at different altitudes. Here there is no question of length of daylight varying and hence the delay in breeding at higher altitudes. Obviously the delay at higher altitudes is in response to the lack of sufficient food. I contend, that even temperature has a less important role to play, as will be obvious when I site the case of birds breeding in the scrub jungles of Saurashtra. We in this part of the country, and that is true of much of north India, have the Monsoon appearing erratically but with sudden intensity, and the birds which have been rather in the depressed summer mood, suddenly burst into nest construction activities. But on all occasions the bustle starts with the monsoon's arrival, whether late or early. On the other hand in well-watered localities, and where the food supply is ensured, as in the Gir forest, or in irrigated gardens, the birds which elsewhere breed when the rains commence, start doing so in April and May; witness the Redvented and White-eared Bulbuls of Saurashtra and the Delhi gardens.

Recently, what appears to be a very interesting shift, is taking place in the selection of nesting sites of some of the tree or bush nesting birds. Now for the last three years, a pair of Redvented Bulbuls have been building every hot season inside the drawing room of the Head Master's house at the Rajkumar College, and that too not in some indoor plant, but on window pelmets! A similar unusual nest has been constructed among the chains of a porch light in a friend's house. It is commonplace for Purple Sunbirds to enter houses and attach their pendant nests to wing chains, hanging electric light wires, etc. What other birds might next enter human habitations for nesting is to be seen. Is this what will in time become a common practice among the bulbuls and sunbirds, by gradual appreciation that the new sites offer greater protection than the traditional ones? Might this not be a modification, intelligently brought about over the old instinct? The way crows and kites, mynas and sparrows have adhered to man shows that instinct of self preservation and propagation, though all powerful as it is also in man, is not necessarily rigid, and that birds are able to modify their instincts to suit their surroundings, provided the process is gradual and there are no justifications for reverting to type.

I am sure my readers will therefore agree, that birds like man are intelligent, and can adjust themselves to circumstances in a way which mere instinct cannot make them do, and that the great movements of birds, and their breeding, is to a certain extent controlled by intelligence and that though this ability is rudimentary as compared with man, it is present, and given a chance does show itself.

K.S. Lavkumar, Rajkot

BIRD BEHAVIOUR. By Derek Goodwin. Pp. 123 (22 cm. x 14 cm.). 16 monochrome illustrations from photographs; 11 text figures. Museums Press, London, 1961. Price 12s. 6d.

The study of animal behaviour has gained increasing prominence in the post-war era. Naturally enough, birds have come in for a proportionately large share of this attention, and objective critical analyses of the ways in which birds behave under varying stimuli have opened up entirely new perspectives. Innate behaviour patterns, it would appear, change far more slowly than outward form. Thus, a careful study of bird behaviour has, in many cases, revealed truer family relationships between certain groups of birds than as hitherto assessed on morphology alone. On the whole, behaviour studies have helped to resolve a great many anomalies, and at the same time added an element of scientific purposiveness to the aesthetic enjoyment of bird watching.

Those who have read Konrad Lorenz's KING SOLOMON'S RING (and those who haven't must lose no time in doing so) will have been fascinated by some of the revelations from animal behaviour studies. However, would-be students of bird behaviour have sometimes been understandably put off by the rather bewildering (and often unnecessary) jargon that individual experimenters have chosen to build up around it, tending to create the illusion that bird behaviour is a far more complex and difficult study, and far less emotionally rewarding for the non-professional bird watcher, than it actually is.

This little book, by one whose experimental studies in bird behaviour have achieved significance in recent years, is an admirable introduction to the subject, and goes a long way to dispel these popular misconceptions regarding it. It tells in simple unpedantic language what bird behaviour study is all about, using familiar everyday examples from his own personal experience and observation to illustrate his points. The book offers, moreover, a number of useful suggestions about how amateur bird watchers can add to knowledge by simple observation of the ways in which birds respond in a variety of situations.

The chapter headings give a good idea of the aspects of bird behaviour which the book covers: Instinct and Learning - Finding Food - Escaping from Predators - Social Life - Reproductive Behaviour - Preening, Bathing, and Anting - Roosting. It ends with a list of useful books for further reading.

I notice that this slim volume is No. 2 of The Brompton Library series on "Instructions to Young Ornithologists". No. 1 (which I have not seen) entitled BIRD BIOLOGY by J.D. Macdonald also sounds most useful for the young ornithologist - and perhaps young not only in years. If BIRD BIOLOGY is equally good, it must be a very good little book indeed. Armed with these two simple guides, the beginner should find himself well set for pleasurable and purposeful bird watching.

S.A.

NOTES & COMMENTS

This newsletter has now completed 10 months of its existence. When Newsletter No. 1 was put out in December last year there were quite a few persons who were critical of this venture and pessimistic about its future. It is now evident from the correspondence columns that a small minority of bird watchers and naturalists is keenly interested in the continuance of this effort. We are exerting ourselves towards this end and hope that our readers will be able to find time to contribute more usefully than by 'just a letter of thanks' (as one reader puts it).

May we remind our readers of the project to study the arrival and departure dates of the Rosy Pastor in India. Apart from a note by K.S. Lavkumar published in the Newsletter No. 5 of April 1961, and one by Dr. Salim Ali in Newsletter No. 6 of May 1961 no other notes have come in. It is important that readers co-operate with us in this project. The Rosy Pastor is a comparatively easy bird to spot and recognize, and there should not be much difficulty in keeping notes about the arrival dates of these birds and about the feeding habits and the general behaviour. The birds must have already come to the various parts of our country for the Rosy Pastor is one of the first migrants to arrive. Let us see how many notes we get on this subject for Newsletter No. 11.

Several readers seem to object to getting these newsletters free and are anxious to pay a subscription. We, however, propose to stand by our original commitment to send these free to members till December this year. From January 1962 we will collect a subscription based on the cost of producing the Newsletter and the postage. Incidentally we wrote to the Post Master General asking for concessional rate of postage for this publication of 'educational value'. His reply was that since this newsletter was being sent free there can be no question of concession. We shall resume negotiations with the Post Office after the subscription has been decided upon.

CORRESPONDENCE

In Newsletter No. 6, Capt. N.S. Tyabji sent a note on birds at Cochin ending with the challenge to readers to enlarge the list. Here is an answer by Prof. K.K. Neelankantan. - Eds.]

"Lest your offer in the 6th number of the Newsletter for Bird Watchers should go without any takers, I am sending you a list of the birds I have noticed at Ernakulam. Though I have not done any bird watching worth the name in that locality, I have kept notes on the birds that caught my eye during brief periods of stay in the course of the past 8 years. Names conform to those used in Salim Ali's BIRDS OF TRAVANCORE AND COCHIN.

Residents

Jungle Crow	Purplerumped Sunbird
House Crow	Tickell's Flowerpecker
Tree Pie	Small Green Barbet
Iora	Koel
Redvented Bulbul	Crow Pheasant
Magpie Robin	Small Green Bee-eater
Small Minivet	Pied Kingfisher
Black Drongo	Brownheaded Storkbilled Kingfisher
Tailor Bird	Whitebreasted Kingfisher
Blackheaded Oriole	House Swift
Common Myna	Palm Swift
Jungle Myna	Spotted Owlet
Whitebacked Munia	Brahminy Kite
House Sparrow	Pariah Kite
Redrumped Swallow	Blue Rock Pigeon
Pied Wagtail	Whitebreasted Waterhen
Purple (or Loten's?) Sunbird	Pond Heron

Local Migrants

Ashy Swallow-Shrike

Migrants

Blyth's (?) Reed Warbler	Laughing (?) Gull
Greenish (?) Willow-Warbler	Sea Tern (sp.?)
Bluetailed Bee-eater	Common Sandpiper

"There is, or used to be, a large colony of House Swifts in the Siva Temple near the Library.

"The following birds were seen at one time or another flying late in the evening towards the Island in large numbers, apparently to roost there: Pied Wagtail, Redrumped Swallow.

"In December '54 I used to see many hundreds of Swallows streaming over the Shunmugam Road towards the Island every evening. As they seemed to issue out of the walls like winged termites after the first showers, it was very interesting sight indeed.

"I once saw the Jungle Babbler near Thevara.

"Crows of the area seemed to go to a palm grove west of Ernakulam to roost, while the Common and Jungle Mynas seem to go inland for the same purpose.

"I am sending this direct to you as I don't think it is likely to interest other recipients of the Newsletter."

K.K. Neelakantan
Ambattupalayam, Chittur-Cochin.

"Many thanks for your letter and the copy of B.W.N.L. 9 which reached me today. It is quite excellent and at this rate I shouldn't think

/In Newsletter No. 6, Capt. N.S. Tyabji sent a note on birds at Cochin ending with the challenge to readers to enlarge the list. Here is an answer by Prof. K.K. Neelankantan. - Eds./

"Lest your offer in the 6th number of the Newsletter for Bird Watchers should go without any takers, I am sending you a list of the birds I have noticed at Ernakulam. Though I have not done any bird watching worth the name in that locality, I have kept notes on the birds that caught my eye during brief periods of stay in the course of the past 8 years. Names conform to those used in Salim Ali's BIRDS OF TRAVANCORE AND COCHIN.

Residents

Jungle Crow	Purplerumped Sunbird
House Crow	Tickell's Flowerpecker
Tree Pie	Small Green Barbet
Iora	Koel
Redvented Bulbul	Crow Pheasant
Magpie Robin	Small Green Bee-eater
Small Minivet	Pied Kingfisher
Black Drongo	Brownheaded Storkbilled Kingfisher
Tailor Bird	Whitebreasted Kingfisher
Blackheaded Oriole	House Swift
Common Myna	Palm Swift
Jungle Myna	Spotted Owlet
Whitebacked Munia	Brahminy Kite
House Sparrow	Pariah Kite
Redrumped Swallow	Blue Rock Pigeon
Pied Wagtail	Whitebreasted Waterhen
Purple (or Loten's?) Sunbird	Pond Heron

Local Migrants

Ashy Swallow-Shrike

Migrants

Blyth's (?) Reed Warbler	Laughing (?) Gull
Greenish (?) Willow-Warbler	Sea Tern (sp.?)
Bluetailed Bee-eater	Common Sandpiper

"There is, or used to be, a large colony of House Swifts in the Siva Temple near the Library.

"The following birds were seen at one time or another flying late in the evening towards the Island in large numbers, apparently to roost there: Pied Wagtail, Redrumped Swallow.

"In December '54 I used to see many hundreds of Swallows streaming over the Shunmugam Road towards the Island every evening. As they seemed to issue out of the walls like winged termites after the first showers, it was very interesting sight indeed.

"I once saw the Jungle Babbler near Thevara.

"Crows of the area seemed to go to a palm grove west of Ernakulam to roost, while the Common and Jungle Mynas seem to go inland for the same purpose.

"I am sending this direct to you as I don't think it is likely to interest other recipients of the Newsletter."

K.K. Neelakantan
Ambattupalayam, Chittur-Cochin.

"Many thanks for your letter and the copy of B.W.N.L. 9 which reached me today. It is quite excellent and at this rate I shouldn't think there would be much difficulty in your getting people to pay for

their copies!

"I have been thinking of my contributions to the Newsletter and I am certain in my mind that a 'progressive' Bird List of this area compiled for each month is now necessary as I feel that it is probable that there have been changes both in local distribution and local migration of certain species. There is no other means of putting this list on record for critical scrutiny by others, and that is why, possibly, a series in the Newsletter on Delhi birds, though of limited interest would help to provide a 'record'. One could keep adding to the list and thus in course of time, with contributions from others in the area, it could be consolidated for reference purposes. . . "

Capt. N.S. Tyabji, New Delhi

/Proceed with the list. - Eds./

"I have good news for bird watchers. Two documentary films: (1) Corbet National Park, and (2) Water Birds of India are ready and complete. The first one was released during the last week of July, and the second will be released very soon. Both the films are interesting and informative to our readers and I suggest that they should not miss them."

P.W. Soman, Dadar

"Many thanks for sending the number of the "Ring" magazine, which I have found most interesting. I have taken the particulars for taking it in when I get to England.

"I have seen nothing further about the formation of your Bird Watchers' Society or club. . . ."

J.H.H. Peppé

Birdpur Estate & P.O., Basti Dist.

/You are likely to hear about it in the next issue. -- Eds./

"I have been delighted to see the first nine issues of your enterprising Newsletter. . . I have been hoping that when I did so, I should be able to send you something rather more useful than merely a letter of thanks as your greatest need obviously is a steady supply of information and articles suitable for publication. the Newsletter can become a most valuable and informative link between ornithologists in this country, a thing we can profit from immensely. You have got off to an excellent start, and you have my best wishes for the future."

R.A. Stewart Melliush,

Oxford University Press, Madras

"May I suggest you reproduce an article in one of the past Bombay Natural History Society's journals on Wagtail identification and there is a booklet I had read on Phylloscopi or Leaf Warblers which might usefully be reproduced. I am sorry to be so vague, but I am sure Dr. Sálim Ali might be able to give you the right clue."

K.S. Lavkumar,

Rajkumar College, Rajkot

"Please let me know if a short description of the birds of Ajmer, local and migrant, by boys will be of any use to you."

R.N. Chatterjee

Director, Natural History Society,
Ajmer.

/Articles will be most welcome. - Eds./

"I am anxious to be continued on the mailing-list of the Newsletter for Bird Watchers. I find the Newsletters very exciting and regular too. This is just about the stuff that will interest layman interested in bird watching but practicing different profession or discipline. Please carry on and more strength to your shoulders.

"Would it be possible for you to give a short list of commoner birds which can be seen in the coming month? and how we can check their identity - (without the facility of catching the birds)? We do get opportunities to go out in the jungles around Bombay and many of us like to know our commoner birds when we come across them. Is it also possible to hear the sound recordings of commoner Indian birds?

"In the meanwhile, I should also like to know if we can call certain birds as representative birds of western Indian region, and if so, which are they?"

P.V. Bole,
Professor of Botany, St. Xavier's College,
Bombay

"I have recently received the August issue of the Newsletter for Bird Watchers. It makes very interesting reading. Especially I liked very much your observations on 'Some Birds around Badrinath' and 'Bird Watching in Terrai'. I agree with the view expressed by C. Nandini of Shimoga, that a magazine of the proposed Ornithological Society in India, should contain both technical and popular information. I would very much love to read your notes regularly,

N. M. Mistry, Dadar.

Zafar Futehally,
Juhu Lane,
Andheri,
BOMBAY 58.

SOME BIRDS AROUND BADRINATH (2)

From Badrinath, the valley becomes a broad U-shaped valley that suggests a time in the remote geological past, when it contained a gigantic glacier, which has receded to leave the remnants that today form the Sathopanth Glacier at the head of the valley from which a glacial river flows out as the Alakananda. These old glacial valleys have very broad flat floors gently grading into greater heights, but the sides steeply rise upwards often in sheer cliff-faces polished to a smoothness which only the giant and icy chisels of a glacier can do. Here and there and at complete abandon, great boulders lie strewn for no apparent purpose on the flat floor; these are also the manifestations of the great ice age, when glaciers of proportions undreamed of choked the upper Himalayan valleys to depths of several thousand feet. Such a valley then is the one above Badrinath, and the track to the Vasudhara leads up it, giving easy work for limbs sorely taxed by the hitherto sheer gradients of the lower valleys. The track for the first three miles or so passes through fields edged by walls of loose stones, and across small side streams with their pairs of perky Whitecapped Redstarts, and occasional Brown Dippers; it then reaches a bend on the Alakananda, and crosses over by a suspension bridge to rise up to the border village of Mana. This little settlement is used by the Bhotias during summer, when their women folk till the scanty soil of the nearby fields, while the younger men with their pack trains of goats, sheep and ponies move northwards across the Mana Pass into Tibet for trade. Just a little way beyond Mana, the path crosses the turbulent Saraswati, a large tributary of the Alakananda, by a natural rock bridge. Here the raging Saraswati is spanned by a single rock, and passes through a cavernous gorge, with the rock-sides arching over to almost meet overhead. It is an overpowering place. Among the high water sprayed ledges live pairs and parties of Snow Pigeon unmistakable by the great amount of white in their plumage, and a distinct grey head. Also sharing the nest sites are a few Rock Pigeons. If the birdwatcher is lucky, he might well see the flitting form of a Wall Creeper which is about the size of a large sparrow, with round full wings like a Hoopoe and the same uncertain flight of a butterfly. The general coloration is dark grey with crimson linings in the wings; the beak is long and curved, but it is the habit of alighting and running up sheer walls that is diagnostic of the Wall Creeper and it lives its perpendicular life on cliff faces above 14,000 ft. in the Himalayas, descending to the foothills in winter, where birds have been recorded on the sandstone faces of imperial buildings. Whistling Thrushes are here in their elements and as likely as not, a pair have built their bulky nest in some inaccessible cranny over the raving waters.

The way now becomes more inclined and uneven as it rises and dips out of and into snow filled gullies, and turns and twists among, around and over great conglomerations of boulders and stones brought down by winter snow-slides. Small bushes of rose add greenery to the harsh surroundings, while early iris bank the few grassy verges. This is Chukor country, and this magnificent partridge with its grey plumage, smart black and white

bands on the flanks and a coral red bill may be seen surmounting some prominent rock, standing motionless for minutes on end. In fact all the birds of this area seem to have a predilection for boulders and here they perch like little kings of the castles singing or twittering their romantic hearts away to the enchantment of their drab and self effacing mates feeding among the bushes or in between the rocks. The commonest rock percher is the Eastern Meadow Bunting, and its small chestnut form is made more distinct by the grey head with black and white stripes down the crown. It is one of the finches, and its song is a cricket-like chirruping most energetically delivered with great persistence. When approached too close, it flies off with a flick of the tail, showing white on the outsides as it flies undulatingly to alight on another rock.

Another brown and indistinct bird of about the same size is the Hodgson's Pipit, the male of which every now and then leaves its rock to flutter high into the air, and then to come down in a spiral glide singing its love ditty as it does so. The Himalayan Ruby Throat is another rock percher proclaiming his suit in sweet avian lyrics. A Ruby Throat is very like our Indian Robin in general habits and at a distance the cocked tail and upright stance is a close resemblance. The male is a fine dark slaty grey bird with a startling white supercilium, and black throat and chest, sporting a bright ruby red patch on the throat. The hen is as uniformly dull as a female Indian Robin. These attractive little birds are quite common on rocky slopes throughout the Himalayas from 1000 to about 14,000 feet.

One more of the rock perchers' fraternity is the Rufousfronted Hedge-Sparrow, or Accentor. It looks very much like a sparrow, but with a sharp beak, and with a rufous breast. This small bird also seems to find singing into the winds that race up these high valleys a most satisfying pastime. The largest of the rock perchers is the familiar Blue Rock Thrush of the plains, where it is a winter visitor fleeing in summer to the cliffs of the Himalayas from 6000 feet to almost the snow line. The cock bird is a bright slaty blue which looks lovely when the sun shines onto it at a favourable angle, but at other times, it looks very uniformly dark; the upright poise, the very sharp beak, and the bowing and flicking of the wings when looked at, are all very characteristic. The female looks less uniformly dark, and has many speckles and is browner than her mate. The cock Blue Rock Thrush has a rich voice which he uses freely as the summer advances up the great valleys.

Forming a very composite group and a part of the typical bird population of the high Himalayan valleys are the Rose Finches. There are a variety of these, and they are indeed the most beautiful among the birds at these high altitudes. They are related to the sparrows, and like them, have conical seed-crushing bills, and the typically forked tails of all finches. They, for all the brilliance of plumage, are rather insignificant as they feed on the ground in the shade of large stones. The males are all varyingly garbed in reds from the deep crimson of some birds to the light pink of the commonest, the Pinkbrowed Rose Finch. Undoubtedly the most colourful is the Common Rose Finch with a truly bright rose pink -- almost crimson on the head -- plumage. He is rather more conspicuous as he has a habit of perching on some bush serenading his drab little hen. All rose finch females are rather quiet in their coloration, and have varying depths of browns streaked lightly or heavily with darker feather shafts. The males are the only sure identity to the species. Even so I will not here go into too great a detail of describing the various species, but would recommend instead my readers to try and get up to the mountains and to see the birds for themselves and to take down detailed notes for later checking up with the FAUNA OF BRITISH INDIA, Birds, or some other similar work. It will suffice

here for me to simply list the different species I saw: these were, the Common Indian Rose Finch, the Pinkbrowed Rose Finch, and the Redbreasted Rose Finch.

The Hodgson's Short Wing is again one of the birds restricted to the upper slopes of the mountains. It leads a rather secluded life among the thickets of roses, or dodging in and out of rubble heaps at these elevations. The male often ascends to some exposed perch and gives vent to a rather short but sweet song, and it is then that he is seen most often. The Short Wing is one of the robin-like birds, hopping on the ground on rather long legs, with the tail held at a cock. The plumage is uniformly slaty grey, with a white abdomen and vent, and chestnut prominently displayed on the bases of the outer tail feathers. The female is a dully replica of her lord.

The visitor will never fail to notice the Bluefronted Redstart, which is one of the commonest birds around Vasudhara. The cock redstart rather resembles our wintering Black Redstart, only that the orange is brighter and with more yellow in it. The tail has only the outer feathers orange; the central ones are black. This with a bright cobalt blue on the forehead are good distinguishing features. The female is like the female Black Redstart only that she looks paler. At the time of my visit, most of the pairs had young out of nest, which suggests that this Redstart breeds fairly early in the year, possibly laying almost immediately after the snow melts. In the Amrit Ganga Valley just across the mountain divide, I had seen these birds actively staking out territories early in spring, when the snow still lay thickly on the slopes, and in deep rifts in the gullies. The parents got very agitated, and continually kept up a swearing till I moved off the territory, only to be sworn at by another couple just beyond. I must say I did not very much mind the oaths thrown at me, for often as not these got together an assortment of other birds who came across to see what all the trouble may be about, and I felt very like a stranger caught in a street brawl with a crowd collecting round to have a look, though I did not mind all the staring at I received from these crowds of inquisitive bystanders.

Grey Wagtails and the Hodgson's Pied Wagtails are quite common along the river, on the grassy meadows, the former rather prim in their summer attire of grey above, a black throat and yellow under parts in the males. They are at this stage most amourosly inclined and are all in a flutter over their little spouses tripping along across the grass. The nuptial flight of the male Grey Wagtail is an aimless floating on rapidly beating wings accompanied by a wheezy twittering song. The Pied Wagtail is as dashing as the White Wagtails at home in the plains, with the same undulating dashing flight and loud calls, only a trifle more impetuous. Best description of this bird is to say that it is a pied wagtail -- there is no other at this altitude to mistake it with. One male Yellowheaded Wagtail was also recorded by my companion, and what had struck him most was the bright yellow head. The name is most apt -- a thing I cannot say for many other birds.

Among the thick bushes, and often flitting around on the ground is the typical Phylloscopus of this area, the Tickel's Willow Warbler. It is a small sprite with olive green above and dusky yellow below -- quite indistinct and in keeping with all its tirbe, a confusion on wings, difficult to describe! The warblers are very plentiful, and there seemed to be only this one species and so I suffered less eye strain squinting through field glasses, as I did at lower altitudes where a very wide range of species of Phylloscopi are found side by side, and all moving around at great speed and with erratic movements.

A common sound of the upper Alakananda is the deep Cuckoo Cuckoo Cuckoo of the Asiatic Cuckoo that parasitises on the Redstarts and other small birds nesting here. The sound carries far and has a ventriloquistic quality which make locating the bird difficult. Its fast hawk-like flight low over the ground and dodging among the rocks and boulders is a clue. If located, it will be seen on an exposed position calling with the throat filled out like a pouter pigeon's. Flying across the sky are flocks of Eastern Swifts on long bow-shaped wings and forked tails. They are great aeronauts and their speed is breath-taking. This swift which is all sooty brown, is often seen in company with the Alpine Swift which is readily identified by its white under parts crossed by a broad grey-brown band on the breast. Both these swifts are very much larger than our House Swifts and can never be mistaken. The Griffon on broad motionless wings and the great Lämmergeir with a nine foot wing span are the kings of the air as they quarter the skies sailing along the cliffs and crags without the slightest twitch of the flight feathers. They are an unfailing spectacle to watch.

The most engaging of all the birds are the two species of Choughs. Both are glossy black with full bodies, one with a long curved coral red beak and red legs, and the other with yellow legs and a neat short yellow bill. The former spends its time probing on wet earth and on pastures for insects, while the latter is averse to nothing by way of food, and at the Vasudhara fall where the pilgrims invariably scatter grain, they are very forward and accept food thrown to them. They are very restless, and most of the time is spent gliding and gambolling in the air and the least pretext suffices to get them writhing around uttering their soft and musical 'choughs'. One of our porters had with him a bottle of a rather potent local brew, and we borrowed some of this to make balls of sattoo-a-la-raksi. Instead of appreciating this excellent offering they refused it! Who says birds cannot taste or smell? We never had the pleasure of arresting a drunk Chough and bringing him down to a lock-up. It is as well, for a Chough is a bird of the unfettered Himalayan elements, for ever circling and tossing, rising and falling, and as free as the winds that breathe across these magnificent mountains. Like Wordsworth I often lie on my couch in a pensive mood and there is a sudden joy as the Choughs come circling across that 'inner eye which is the bliss of solitude'.

K. S. Lavkumar, Rajkot

(Concluded)

BIRDS OF NAJAFGARH

Having read Mrs. Ganguli's interesting note on the 'Birds at the Najafgarh Jheel', I feel it may be useful at this stage to add my own notes made during visits to the Jheel on 9th, 16th and 20th July, 1961.

Since Mrs. Ganguli's list (Newsletter 10) is comprehensive my list is merely in the nature of a follow-up. Wherever possible I have indicated against each species the approximate size of flocks in round numbers, the intention being to provide a rough idea of the total bird population at the Jheel at the time of observation as also to give a rough indication in terms of "proportionate representation" of each species at the site.

The conditions at the Jheel were as described by Mrs. Ganguli and no further comments are called for.

A species which Mrs. Ganguli has not mentioned specifically is the Little Indian Pratincole (Glareola lactea Temminck) which was present on all the three occasions of my visits in very large numbers. A quaint and delightful bird to watch, its general appearance is aptly described by its other name -- the Swallow-Plover. Its general coloration provides it with almost perfect camouflage on ploughed or broken ground especially under certain light conditions. It was seen in very large flocks and I estimated the total number in that area as between 3000-5000 birds. These birds though often seen singly on the wing, provide a fascinating spectacle of grace and precision flying when they rise suddenly from the ground, as a flock, and wheel and turn in the air in perfect unison seldom above 100 feet from the ground. There is a flash of white under parts suddenly turning to grey with each banking movement and the flock descends to the ground en masse with the utmost precision. The whole manoeuvre which seldom lasts for more than a few minutes is a spectacular exhibition of precision flying and aerobatics.

A large flock of these birds was also observed on the islands in the Jumna's course off Okhla. Unfortunately no observations were made during the nesting season (March to May).

Redwattled Lapwing: (50); observed feeding in company with the Pratincole. An interesting feature of their movements, observed both at Najafgarh and Okhla, was the fact that on many occasions they were seen to join the Pratincoles in their aerial manoeuvres keeping perfect station with the rest and in every way behaving as one of the flock.

Pheasant-tailed Jacana: (200); seen feeding in mixed parties of waders and other waterbirds in the more marshy areas. Those in breeding and non-breeding plumage seemed to be equally divided.

Black Ibis: (3); birds observed feeding singly or in pairs in the drier areas. Only 2 birds were seen at the water's edge in company with Blacknecked Storks.

White Ibis: (6); observed both on the wing and at water's edge in company with Painted Storks.

Blacknecked Stork: (50); at water's edge in company with:

Painted Stork: (50);
Spoonbill: (50);

Whitenecked Stork: (25);
Flamingos: (200)

seen on 16 July only

Sarus Crane: (20); dispersed over a large area of drier ground. Birds heard honking on the ground and in flight.

Spotbill Duck: (50); Nukta: (10); Garganey Teal: (50): seen in marshy ground mostly in company with other waders and waterbirds.

Little Grebe: (20); in small isolated ponds and puddles.

Fantail Snipe: (100); in mixed company in marshy ground.

Painted Snipe: (2); flushed from a dry reed bed.

Common Sandpiper: (50); these birds were observed at Okhla as well on 2.7.61 in small numbers; possibly resident.

Spotted Sandpiper: (100); Green Sandpiper: (10); Redshank: (50) in mixed company with other Sandpipers and waterbirds.

Coot: (5); on the wing and in reedbeds at water's edge.

Little Egret: (100); Cattle Egret: (100); Paddy Bird: (100); Grey Heron: (6); seen singly dispersed over the area.

Blackwinged Stilt: (1000 plus); in mixed flocks.

Apart from the typical jheel and waterbirds the Najafgarh area sustains a fairly large variety of other species which I list for record purposes.

An assortment of Eagles, Kites, and Vultures are either resident in the area or use it purely as a feeding ground. The large numbers of rodents, hares, frogs, snakes and lizards which infest the area must provide adequate feeding conditions for a large population of raptorial -- even during the nesting seasons. The Vultures are also well provided for by the various villages in the area; dead and dying cattle being left in the fields to be conveniently disintegrated by these scavengers.

On the first occasion a King Vulture, 6 Whitebacked Vultures, and an equal number of White Scavenger Vultures were seen at a carcass. Fairly large numbers (mixed) were seen in the air subsequently quartering the air-space above in company with Pariah Kites. The raptorial were represented by the Tawny Eagle, Pallas's Fishing Eagle, White-eyed Buzzard, Laggar Falcon, Shikra, Brahminy Kite, and Pariah Kite.

The Finches and Larks were well represented. The Blackbellied Finch-Lark was present in large numbers both near the jheel and in the fields. The same habitat supported the Small Indian Skylark, and Redwinged Bush-Lark, both seen performing in the air, performance of the former being the more polished and somehow authentic, whereas the latter's was in the nature of a good imitation. A few Whitethroated Munia were seen in small flocks of about 6 to 8 birds in neem and babool.

The Grey Partridge is plentiful in the area as was evident from the calls. A few were seen in the open. A small flock (about 12 birds) of Rain Quail was observed in a newly ploughed field.

Three enormous flocks of Rock Pigeon (estimate at over 500 birds each) was seen in freshly sown fields; it will be wonder if anything does sprout after their ravaging.

The Spotted Dove, Little Brown Dove, Red Turtle Dove, and Ring Dove are also plentiful in the area and every tree seemed to carry at least one dove's nest within its foliage.

The Bank Myna was present in some numbers obviously resident as typical nests were seen in mud walls near Najafgarh Village.

Amongst the warblers the Tailor Bird, Ashy Wren-Warbler, and Streaked Fantail Warbler were observed, the former in green hedges and the last in the long grass and reed around ponds.

The House Swift was everywhere on busy wings hawking its tiny prey in the air. A small number of Indian Wiretailed Swallow were seen on the roadside on telephone wires and hawking for insects.

The Grey Shrike was seen and heard often; as also the Baybacked Shrike. The Rufousbacked Shrike though present seemed to be somewhat 'rare' in the area as indeed it is for the rest of Delhi, in a comparative sense.

A pair of Pied Crested Cuckoo was seen near a Jungle Babbler's empty nest in a roadside hedge. The Jungle Babbler, Common Babbler, and Large Grey Babbler were seen in large numbers. The Yellow-eyed

PROPOSED INDIAN ORNITHOLOGICAL SOCIETY

Readers of this Newsletter who have not seen the first issue of December 1960 are probably unaware of the proposal for forming an Indian Ornithological Society. We are therefore reproducing the letter written by Dr. Salim Ali and Dr. J.C. George, which appeared in Newsletter No. 1

"With the growing interest in India in bird watching and scientific ornithology, it is felt by some of us that the time is ripe to explore the practicability of forming an Indian Ornithological Society in order to foster and co-ordinate that interest. The objects of the Society would be:

1. To act as a forum for ornithologists all over India (perhaps also Pakistan and Ceylon)
2. To organize, through regional and local committees, field excursions, lectures, discussions, film shows, and similar activities to promote interest in bird life among students, young people, and the general public.
3. To publish a bulletin containing bird notes and more serious articles from members, and in course of time an illustrated journal of international standard, of interest to both amateurs and Scientific Ornithologists.
4. To take an active part in the preservation of the country's bird life, and the establishment of bird sanctuaries etc."

As can be judged from the correspondence columns there is considerable support for such a move, and it is proposed to hold a meeting in Bombay in December to take action on this proposal. The agenda of the meeting will be circulated in Newsletter No. 12 of November 1961.

* * * *

'12 RULES FOR WOOD-LORE'

in/ The Samachar published by the Shri Shivaji Military School, Poona, carries many interesting nature notes, and issue No. 69 they reproduced a note from the National Geographic Magazine which birdwatchers may find of great practical value.

1. Move only when the wind blows and moves the leaves.
2. When a wild creature is near, keep eyes partly closed. Animals do not like to be stared at.
3. Hold hands high so that any movement is down, as leaves fall.
4. Drab clothes are best. But it is movement, not colour, which frightens wild life.
5. If sand flies or mosquitoes are bad, do not be ashamed to use a repellent. Their biting may disturb the toughest observer.
6. When approaching a singing bird, take a step during each song; many birds will not notice.
7. Learn to squat East Indian fashion. That eases muscles and keeps you clear of wet surfaces.
8. When squatting, hold glasses close to nose, so they can be shifted to the eyes.

9. Don't trust your eyes or memory when you can check or re-check.

10. A sudden yell or gunshot frightens wild birds for a few seconds, but the effects of a cough or sneeze will last much longer.

11. A low monotone in speaking is less disturbing than a hissing whisper.

12. In jungle work one person is a necessity, two are a crowd.

(Courtesy : Dr. Beebe,
The National Geographic Magazine.)"

*

*

*

*

MOVEMENTS OF ROSY PASTORS

Our appeal regarding more information about movements of Rosy Pastors has got us one reply from Y.S. Shivraj Kumar of Jasdan, which is reproduced below:

'Hingolghadh is situated in the centre of the Saurashtra peninsula. This season the first small flock of 30/40 Rosy Pastors was seen here on 30.7.'61. Flocks of 3 and 4 birds seen on 31.7.'61 and 1.8.'61. 7 on 4.8.'61. Two flocks of 20/25 birds on 7.8.61. A flock of 300 on 10.8.'61. 2000 by 24.8.61 in nearby roosts. At the time of writing (17.9.61) large flocks of about 2000 birds are in the surrounding area. In August they were feeding exclusively on insects and berries and kept much to the scrub jungle and grasslands. Now they are more in the fields and hedgerows as the bajra crop is attracting them."

CORRESPONDENCE

"During my stay in the Girnar Hills which are famous for their marble stupas, I discovered a strange fact. One evening my uncle told me that there lived a bird which might be taken for a ghost. I learnt that it could imitate the voices of human beings, the calls of other birds and animals and it could make a sound like that of running horses.

"From illustrations in Dr. Salim Ali's book my uncle identified the bird as the Barn Owl (Tyto alba). This owl had played jokes on people and made them crazy. In the forest it yelled in Gujarati 'Run and save me', and suddenly started making the noise of 50 galloping horses. Later on it imitated the crying of a baby. All the people were full of fear till one of them noticed the bird sitting calmly and imitating the voice of a man in distress. It was shot down with a muzzle loader. I have read several books on birds but this fact has never been mentioned."

Anwar Khan of Sultanabad, Rajkot

*

*

*

*

Three Golden Orioles feeding Young in a Nest

"On 25 June 1961, at Shahjahanpur in Uttar Pradesh, I found a nest of the Golden Oriole in the same tree as held one of the Paradise Flycatcher. It contained three young about a week old with sprouting feathers. I marked that two females and one male were feeding them on green spiders (?) and pulp of ripe mango fruits. I was up in the same tree with my Exakta Varex Camera and 300 mm. lens for almost the whole day, and could watch them minutely. On several occasions I saw that two female birds came almost at the same time with insects, and both fed the young. As the male bird and the female did not mind the other female feeding the young, it was clear that these three birds were regularly attending to the domestic duties. At night, at about 9 o'clock, I climbed the tree with a 3-cell torch to find out if these three birds were perched

* * *
Naresh Singh, Wild Life Warden (Publicity),
Uttar Pradesh.
* * *

"The Eastern Grey Wagtail is here and I noticed solitary birds on the Takdah (5500 feet) forest tracks, first on the 3rd September. There seems to be some taxonomical dispute. As far as I recollect, I thought this species was so far called Motacilla cinerea melanocephala. I was therefore surprised to find it referred to as M. caspica cinerea. Taxonomical changes are apparently the forte of botanists, but this seems to have invaded the realm of ornithologists too! The full synonymy of names might be interesting and the article which starts with the series on pp. 2-4 of your Newsletter No. 10 for September 1961 will be followed with interest to see if this aspect is also covered."

Ahi Rudra,
Divisional Forest Officer, Darjeeling.
* * *

"I note from the Newsletter No. 10 that you have not mentioned the note sent by Dr. Jorge Boshell from this field station, under your heading 'Notes comments', about the Rosy Pastor. The same was published in the Newsletter No. 5 of April 1961.

"I collected a solitary Rosy Pastor on 25th October 1960, from the area. This was a juvenile and hence I wonder whether this was one of the outgoing migrants. Could you kindly clarify this for me. This was the first time I was seeing this in Sagar area. During November and December, 1960, I could not see any Rosy Pastors. In January 1961, I saw a flock of them flying westwards, but no more. But from the early part of February 1961 till late March 1961, there were literally hundreds of them all over the vicinity of Sagar town. I observed the last of them on 5th April 1961, and since then, have not seen any more!"

P.K. Rajagopalan,
Virus Research Centre Field Station,
Sagar, Mysore State.
* * *

"Chatterji says that he will be sending you some bird notes in due course, though I don't know that there will be anything exciting to report from Ajmer. My bulbuls are still coming to share my fruit in the early morning, and I still don't know whether they are the original pair that started some 4 or 5 years ago, or whether this is a matter of inherited tendencies. I feel that if I ring them I shall probably frighten them off for good. We have been having trouble with crows, which drive away the small birds, and have made a trap according to the directions of the Ministry of Agriculture. Over 20 crows were caught in this the first day, but I cannot say I like the slaughter, though if it means that more small birds will visit and nest in the estate I shall be delighted."

J.M. Gibson,
Principal, Mayo College, Ajmer.
* * *

"The tenth Newsletter to hand. The reproduced, Dr. Salim Ali's article on the characters of the Wagtails is still fresh in my mind. Articles like this giving the sexual dimorphic characters in full-grown adult and subadult stages of a particular bird and that too up to the subspecies level will be of immense use to the young people like me who are always working in fields.

"I thank Shri K.S. Lavkumar for having initiated such an excellent article series which adorns the Newsletter."

K. Janakiraman, Bombay.
* * *

together, but I found that one female was missing."

Naresh Singh, Wild Life Warden (Publicity),
Uttar Pradesh.

*

*

*

*

"The Eastern Grey Wagtail is here and I noticed solitary birds on the Takdah (5500 feet) forest tracks, first on the 3rd September. There seems to be some taxonomical dispute. As far as I recollect, I thought this species was so far called Motacilla cinerea melanope. I was therefore surprised to find it referred to as M. caspica cinerea. Taxonomical changes are apparently the forte of botanists, but this seems to have invaded the realm of ornithologists too! The full synonymy of names might be interesting and the article which starts with the series on pp. 2-4 of your Newsletter No. 10 for September 1961 will be followed with interest to see if this aspect is also covered."

Ahi Rudra,
Divisional Forest Officer, Darjeeling.

*

*

*

*

"I note from the Newsletter No. 10 that you have not mentioned the note sent by Dr. Jorge Boshell from this field station, under your heading 'Notes comments', about the Rosy Pastor. The same was published in the Newsletter No. 5 of April 1961.

"I collected a solitary Rosy Pastor on 25th October 1960, from the area. This was a juvenile and hence I wonder whether this was one of the outgoing migrants. Could you kindly clarify this for me. This was the first time I was seeing this in Sagar area. During November and December, 1960, I could not see any Rosy Pastors. In January 1961, I saw a flock of them flying westwards, but no more. But from the early part of February 1961 till late March 1961, there were literally hundreds of them all over the vicinity of Sagar town. I observed the last of them on 5th April 1961, and since then, have not seen any more!"

P.K. Rajagopalan,
Virus Research Centre Field Station,
Sagar, Mysore State.

*

*

*

*

"Chatterji says that he will be sending you some bird notes in due course, though I don't know that there will be anything exciting to report from Ajmer. My bulbuls are still coming to share my fruit in the early morning, and I still don't know whether they are the original pair that started some 4 or 5 years ago, or whether this is a matter of inherited tendencies. I feel that if I ring them I shall probably frighten them off for good. We have been having trouble with crows, which drive away the small birds, and have made a trap according to the directions of the Ministry of Agriculture. Over 20 crows were caught in this the first day, but I cannot say I like the slaughter, though if it means that more small birds will visit and nest in the estate I shall be delighted."

J.M. Gibson,
Principal, Mayo College, Ajmer.

*

*

*

*

"The tenth Newsletter to hand. The reproduced, Dr. Salim Ali's article on the characters of the Wagtails is still fresh in my mind. Articles like this giving the sexual dimorphic characters in full-grown adult and subadult stages of a particular bird and that too up to the subspecies level will be of immense use to the young people like me who are always working in fields. "I thank Shri K.S. Lavkumar for having initiated such an excellent article series which adorns the Newsletter."

K. Janakiraman, Bombay.

"I shall think out a scheme of sending you a month by month note on the birds of the time, which might be useful to the readers. Why not ask knowledgeable to write on birds of their various areas? As India is such a vast country, that what is true of this part is certainly not so of the Eastern region, or for that matter people in the South might well complain we are neglecting them. Would it be feasible to get a panel of leading birdwatchers drafted from the various regions of the country to send us these notes so that everybody can with profit dip into our pages? I am prepared to help in whatever manner you think fit to reduce your labour and to help in promoting this project. I am a visionary and here is one of my dreams coming true.

"Another suggestion I might make is that all of us, through our juvenile columns, start off a cry for setting up sanctuaries for birds in various parts of the country, where we can have a conveniently placed birdwatcher taking visitors around. It is absolutely necessary that some such scheme be worked out, and I am certain the Government will be of considerable help if we get their publicity crowd to join us in the various projects, and encourage young people to benefit from our schemes.

"Can I request P.W. Soman to tell us more about the two interesting bird documentaries? Are they available in 16 mm., and are they sent out to schools? If so, where should they be got from?

"It would be very interesting to publish in the Newsletter the Birds of Gujarat by the Yuvraj of Jasdan in sections, so that all of us may be in a position to have, finally, a copy of this article."

K.S. Lavkumar, Rajkot.

*

*

*

*

Rescue of a Parakeet

"On the 9th of June at about 7 p.m. I was coming down the Hanging Gardens to Kemp's Corner with a couple of friends. While coming down by the side of Dongar Wadi (Tower of Silence) I saw a man aiming a catapult at a tree. I stopped to see what the man was shooting and suddenly a parakeet fell down from the tree.

"Knowing that Parakeets have been declared as vermin in the Bombay Wild Animals & Wild Birds Protection Act of 1951, I know that I could not take any action against him. However, the man started to ill-treat the bird to such an extent that I was forced to intervene. Hot words ensued and ultimately I asked the man to come to the police station.

"We started for the Gamdevi Police Station via Gowalia Tank but the man suddenly tried to escape and got into a building. Luckily a police van was just passing by near Nana Chowk. I rushed and requested the police officer to help me. In no time the van came to the building. I pointed out the man at the gate, but he ran inside a house. Since the police were not able to find him, they were compelled to take his wife to the police station.

"I gave my complaint at the police station. The police officer informed me that I should contact the S.P.C.A. I did so and a S.P.C.A. van was sent down, and the parakeet was handed over to them.

"Two weeks later I was called by the court as a witness and the offender was punished with a fine of Rs25/-. The bird was also brought to the court. Its fractured leg was now healing, though still crooked.

"The help rendered by the police authorities of the Gamdevi Police Station and the interest taken by the S.P.C.A. was most commendable."

P.W. Soman, Bombay.

Zafar Futehally,
Juhu Lane,
Andheri,
BOMBAY 58.

BIRD COUNTING

(Reproduced by courtesy of Indian Forester)

Bird counting is a relatively new branch of bird study. Censuses of bird population in the whole or part of a country have been made in Europe and America in recent years. As a result of nation-wide co-operation these censuses have been successful in some degree. Like several other branches of bird study, bird census work is primarily the field of amateur bird watchers. It is to them that scientists look for data on bird populations.

Bird counting is both interesting and useful. One of the chief aims of bird counting is to find out which species of birds are on the decrease in numbers and therefore in need of special protection. A study of the food and feeding habits of birds is by itself inadequate to determine the significance of individual species as economically harmful or beneficial. The local population density of the species has also to be ascertained by counting. The decision to encourage a species or to control its numbers can be made only after a study of the population density of the species. In the case of the game birds, a knowledge of their numbers is essential if they are to form the basis of a profitable food and sport industry.

Contrary to popular belief, forests are not densely populated with birds. In Britian, for example, the approximate number of birds per hectare of deciduous forest is only 100 whereas the corresponding number for gardens and orchards is 750. Population density in different habitats can be determined only by counting. The total bird population of a country can be estimated from a knowledge of the population densities in different habitats and from the total area under each habitat in the country.

Regular counts in different habitats will show the effect of changes in environment on bird numbers; for example, the effect of irrigation, ploughing, logging and other agricultural and forestry practices, and the occasional destruction of local habitats by fire and floods.

In describing the birds of a country or district, words such as 'common', 'rare' and 'abundant' are used to convey some idea about the number of birds present. These are, however, very vague terms which can have different meanings to different persons and under different circumstances. It would be highly desirable to give a quantitative idea regarding bird numbers in such descriptions.

For a beginner in bird watching, an idea as to the normal period of maximum abundance of a given species would be highly useful in his field identification work. Such information can be obtained with frequently repeated counting.

Counting helps to keep a check on the migratory birds -- whether

their arrival and departure are sudden or gradual, and to determine the period of their greatest and least abundance. In migration watching, while the first arrival dates are important, the dates on which subsequent migrants arrived are also of importance to ornithology. Similarly the last departure dates and the dates on which the earlier ones depart are both important. Information on these can be obtained by counting. Daily observation on one or more species on one's way to school or place of work can give much valuable data.

Our knowledge of local changes in bird population must inevitably rest on the careful counting of all bird life. There is a seasonal change both in the number of species of birds and in the numbers of birds present in any given locality. The number of species of birds changes with the arrival and departure of true migrants and passage migrants. Almost nothing has actually been reported showing how the total number of birds changes in a given locality from one month to another. This kind of information depends on counting. Although birds are less conspicuous in autumn than in spring, their numbers are considerably larger in autumn than in spring. Again, in autumn winter visitors arrive from the north in millions but we have no definite idea as to their numbers. There are many possibilities for careful counting in this field. Taken over a period of years, these counts can be combined with weather data to show the probable effects of severe winter, excessive rains and dry summers. The altitudinal migration of Himalayan birds is affected by the severity of winter. This dependence can be clearly understood only by counting.

In addition to seasonal fluctuations, there may be unsuspected fluctuations in numbers of birds over a period of years. Resident populations of birds may gradually build up in numbers until they are relatively abundant and then become relatively scarce. Counts can show whether such cycles exist for Indian birds.

A useful census that is easy to carry out is to count all the individuals of one or more species of birds seen along any regularly traversed route; for example, on the way to work each morning. The figures obtained would be useful for comparisons and would give an idea of the changes in the numbers of the birds in the neighbourhood. Figures 1 and 2 show the results of such a count of White Wagtails and Black Drongos carried out in New Forest, Dehra Dun. An idea about local bird life can also be obtained by censusing birds at communal roosts.

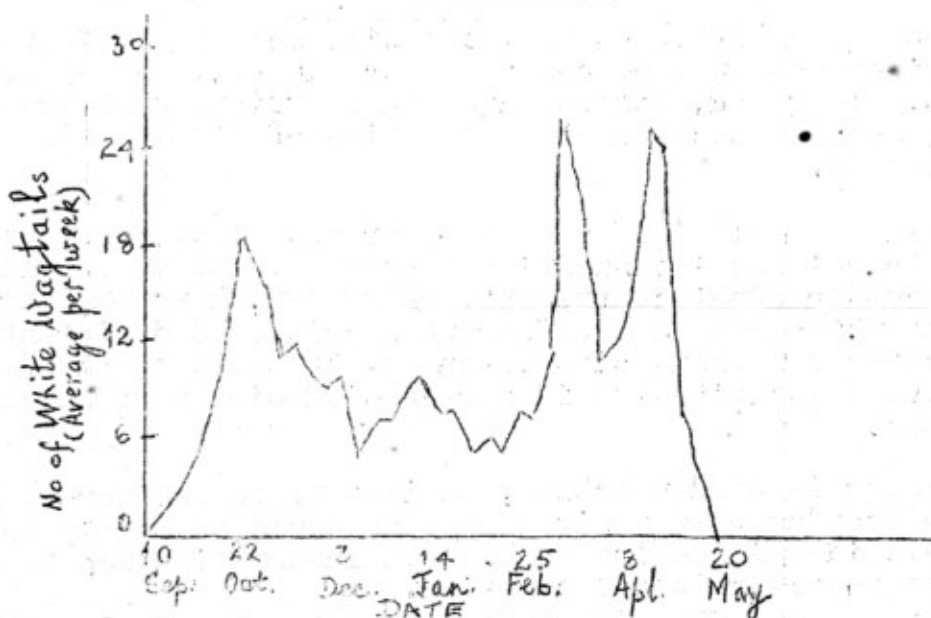


Figure 1. Sample census of White Wagtails (1950-51). Winter visitor. Number is highest during autumn and spring migration seasons.

Very useful results are obtained from counts on selected study areas. A suitable size for a study area is 10 hectares if it is heavily wooded, or 15 or 20 hectares if it is a field. Counts on such large areas can be done on week ends. Breeding bird censuses are also made on study areas. A map of the study area is very useful for this work. Each nest site and particulars regarding it can be marked on the map. Further, if the position where males are observed during each visit to the study area is marked on the map, the extent of their territories will eventually become clear.

NUMBER OF BLACK DRONGOS
(AVERAGE PER WEEK)

DATE

3 Jan. 14 Feb. 28 Mar. 9 May 20 June 1 Aug. 12 Sep. 24 Oct. 5 Dec.

MANGO GROVE

C

Figure 3 is an example of the manner in which a study area may be traversed. Counts are best made in the morning when birds are most active and easy to observe. Morning cruises during the singing season give the greatest efficiency in recording males. In fact the number of males can be recorded by counting their song-perches. Male Pied Bush Chats and male Magpie Robins in New Forest were counted by this method in May, 1953. The numbers were 32 and 97 respectively over 445 hectares. It may incidentally be mentioned here that the number of male Magpie Robins over the same area in December, 1953 was only 7. Pre-dawn count of Black Drongos over an area of 380 hectares in New Forest, gave a figure of 51 in May, 1951.



It must be borne in mind that factors such as weather, breeding cycle, and time of each field trip can influence the number of birds recorded during counts. Precise figures for bird populations can be obtained (1) in small areas; (2) for certain birds that build conspicuous nests or nest in colonies, and (3) for small passerine birds which breed freely in nest boxes. The method involves the setting up of many more nest boxes than there are breeding pairs in the census area and the regular inspection of the boxes to determine the number of breeding birds. This method is particularly useful in managed woodlands where old trees with natural holes are scarce.

Joseph George,
New Forest, Dehra Dun.
Indian Forester, Vol. 87 (9), Sep. 1961
Literature pp. 572-575.

- Bruce Campbell - Bird Watching for Beginners. Penguin Books, 1952.
James Fisher - Watching Birds. Penguin Books, 1951.
Joseph J. Hickey - A Guide to Bird Watching. Oxford University Press.
C.G. Webb-Peploe - 'A Census of Nests in a Private Bird Sanctuary'. J.B.N.H.S. 47.
Mrs. M.D. Wright - 'A Bird Count in Dehra Dun'. J.B.N.H.S. 48, 570 (1949).

Fig. 3. Sketch map showing course of the cruise over counting area
(Adapted from Wright: J.B.N.H.S., August, 1949).

BIRDS ON A FRUIT FARM

Living on a fruit farm in the suburbs of Bombay one has the opportunity to watch a large variety of birds, and of course the fruit grower is always trying to estimate how useful or harmful each species is. Although I cannot claim to have done any serious bird watching, as someone said I do not turn my face away when I find a nest or a new bird. Even so it is not unusual for me to find a dozen nests of the smaller birds like tailor birds, fantail flycatchers, sunbirds, ioras, and bulbuls in a season. Apart from these there is the Baya nesting colony in a palmyra with nearly 100 nests. Also numerous crows, kites, parakeets, mynas, drongos, and doves nest on trees on the farm. This year I have seen at least three families each of Fantail Flycatchers, and Drongos growing up on the farm, also families of tailor birds, and bulbuls. All this I write to give an idea of how much bird life there is even within Bombay Municipal limits. The farm offers plenty of food and shelter in the form of fruits and insects and nesting sites among the mangoes, chikoo, tamarind, guava, and other trees. There are also Cannas, Allamanda, Thunbergia and Lilies to attract sunbirds. We have buffaloes, so there are cattle egrets.

This used to be an area of orchards, gardens and wooded hills. Unfortunately the woods have almost all been cut and many of the orchards too are gone. On the hill behind our house we once saw the Threetoed Kingfisher, Vigors's Sunbird, Blacknaped Blue Flycatcher, and the Pitta. None of these birds are to be found here now. Red Whiskered Bulbuls were more common than Redvented. The reverse is now true. One result of the tree cutting is that many birds have moved into our garden from the woods. There has been a terrible invasion by parrots, one of our biggest enemies. Parrot raids on chikoos have been so successful that several growers in our area have had to give up chikoo growing altogether, and we keep our trees only for the grafts we get from them. Parrots also cause much destruction of guavas and mangoes, specially late

ripening mangoes. Their plumage blends so well with the foliage that one often fails to notice them even when they are feeding on a nearby tree, unless they begin to call.

Another of our chief enemies is the crow. It is specially destructive in the mango season. The crow and the parrot between them damage about 1500 fruits in a good season. Crows in fact are fond of all kinds of fruit and also of organic manures like fish meal. When such manures are applied as surface dressing crows collect to feed on the manure! There is another way in which crows become a menace. After the mangoes are picked is the time for cleaning the trees of parasites and dead branches. But this is also the nesting season for crows, and the parent birds being fierce defenders of their nests, attack anyone attempting to climb trees, with such vigour that the men are put to flight, and the parasites etc. have to be left alone till September. Of course crows also destroy some of our enemies like rats, mice and crabs, but we see them more in the role of enemies than of friends.

When the mangoes are flowering there are many insects around them, some useful, others harmful. Fantail Flycatchers, Ioras, Little Minivets, Magpie Robins, Tailorbirds, Drongos, and Bee-eaters gather to feed on the insects. I don't think even the Bombax and Erythrina in flower attract such a variety of birds. Cattle Egrets are also attracted and begin to cause some damage. In their efforts to get at the insects, they sometimes nip off the inflorescence. Sometimes we are forced to kill them. This must be a good example of a normally useful bird on the farm becoming, under special circumstances a pest.

It is very difficult without proper research to make an accurate estimate of how useful or harmful a bird is even on a particular type of farm, let alone the fact that a bird which is useful to one type of farm may be harmful to another. For this reason it is very good news that the I.C.A.R. is tackling the problem. Take bulbuls and magpie robins for example. They are common birds here and usually do good service by keeping the insect population in check. When the phalsa and the kamrakh are ripening, however, they become our biggest enemies. Given full freedom they would see to it that we get not a single fruit of these two kinds. The Indian Robin seems to do no harm at all. It spends a great deal of time hopping about near the buffalo stables and manure heap, feeding on insects. Yet, I am sure, it devours many earthworms too. And earthworms are certainly very valuable on the farm, even if it is not possible for me to agree with the theory that all that is necessary to keep a soil fertile is to have plenty of earthworms in it. The Fantail Flycatchers, Ioras, Minivets, and Tailor Birds are all favourites with us. They seem to do only good. So also Drongos, Shrikes (we have the Ashy Swallow Shrike, while Rufous-backed and Bay-backed Shrikes are visitors) and Jungle Babblers. But one can't be certain that they confine themselves to eating harmful insects only. And what of the myna, which EHA calls the most properly dressed of all birds? It is also a great destroyer of insects, but when the jamun ripens how the myna hordes arrive to feed on the fruit.

In spite of all this we feel certain about three things: 1. That apart from crows and parrots, the good done by birds outweighs the harm they do. 2. That an effort to wipe out a few species might cause great damage by upsetting nature's balance. 3. That the farm would not be nearly so nice to live on without the cheerful calls and songs of many birds, and the bright colours of others. I have written only of the few birds which are of economic importance to us. Among them it has not been possible to mention such strikingly beautiful species as the Paradise Flycatcher, the two Orioles and

some others that visit us for a few months in the year. Unmentioned also are many birds that are resident on the farm and help to make it more cheerful. Among these certainly are sunbirds, flower-peckers, the Whitebreasted Waterhen, the Crimsonbreasted Barbet, and the colony of bayas.

Amir J. Ali
Deonar, Chembur, Bombay 71

BIRD WATCHING IN COCHIN

On the 12th of September I landed at Cochin. It was raining furiously and the plane had to circle over the aerodrome a few times before it could land. This situation rather dampened my hopes about the prospects of bird watching but since there was little chance of making hay while the sun shone, I thought I must make the most of a bad job anyway. Immediately after lunch I set out. If someone would invent a version of the windscreen wiper suitable for spectacles he would earn the gratitude of many bird watchers like myself. Keeping both the binoculars and the spectacles clear on a rainy day is a trying problem.

Under the conditions a three hour stroll on Willingdon Island proved unrewarding. The only birds I saw were crows, house sparrows, a House Swift, tailor birds, ashy wren warblers, a Magpie Robin, blue rock pigeons, and Pariah and Brahminy Kites. A small list indeed, and with the formidable lists submitted by Comdr. Tyabji and Prof. K.K. Neelakantan fresh in my mind I decided to explore the country a little further away.

At about 5 o'clock I engaged a little rowing boat and set out towards Vipin. I was entirely guided by my boatman about the direction of my travels. I only said that I was keen on seeing birds and he was quite definite that we should head towards Vipin. It was a delightful evening. The rain had now stopped and the waters of the ocean were as calm as that of a lake. I was rather concerned because my boatman had only one eye. He had lost the other in a political battle many years ago. He said that the difficulty in Kerala was that in the same family there were Communists, Congressmen, PSP people, and possibly a few more of other denomination. Under the conditions an eye for an eye and a tooth for a tooth are frequently demanded. But he managed the little craft very skilfully and we were soon at Vipin. Unfortunately this place was quite devoid of birds and we therefore headed to Diamond Island which seemed nice and green from a distance with several large trees and plenty of lantern bushes.

Immediately on landing I saw a Common Sandpiper, several Indian Wren Warblers, Common Babblers, a Blackheaded Munia, a Skylark (species unidentified). There were a very large number of Brahminy Kites and in fact this is perhaps the only place I had been to where there were a larger number of Brahminies than Pariah Kites. The waters around Cochin harbour literally teeming with fish makes life for the Brahminy very easy.

On the evening of the 13th I set out in a taxi towards Alleppy. I told the taximan to take me to open country where I could see birds, and like the boatman of the previous evening he promised to take me to a highly desirable spot within half an hour. A journey of over an hour through Ernakulam was most unfruitful from my point of view. Not a bird was seen. After passing Tripunithura the taxi pulled up near a sign board which said 'Way to Ayurvedic Hospital'. I got down and immediately there was bird music in the air. This was a beautifully wooded place with cashew-

nut trees, arecanut palms, Cassia, betel creeper, and several other varieties of trees. On a cashewnut tree there was a pair of Green Bulbuls or Chloropsis warbling sweetly to each other. A little ahead I saw a solitary Pond Heron, and it is curious that I saw no other heron or egrets during my wanderings. From the top of a tall casuarina descended the chuckling of bulbuls, of both the Redvented and the Redwhiskered species. Crow-pheasants answered each other in the distance. I saw a single specimen of the Whitethroated Babbler in the undergrowth.

It was now getting dark and as I turned back to go a Tree Pie addressed me in its characteristic rude manner. It was sitting within a few yards of me and obviously did not approve of my prying into the affairs of the avians. A Goldenbacked Woodpecker's loud piercing calls announced his presence. A large number of Ashy Swallow Shrikes suddenly appeared overhead. Indian Robins and Magpie Robins were calling softly just before retiring for the night.

When I approached the taxi, the driver came forth enthusiastically with a little Tailor Bird chick in his hand. Apparently the little bird was caught the previous day and there was a long string tied to its leg. It seemed to be a bird which had just come out of the nest. I removed the thread and placed the young chick on a stone wall in a secluded place.

There were several adult tailor birds towit-towiting away, and I left with the hope that the young bird would rejoin its family.

Zafar Futehally

'BIRDS OF NAJAFGARH JHEEL'

Comments by Dr. Salim Ali

'In the commendable supplementary list of the birds at Najafgarh jheel near Delhi by Capt. N.S. Tyabji, I.N. (Newsletter No. 11, October 1961) there are a few points that would seem to need clarification and/or correction by the writer:

1. Page 5: Fantail Snipe: Does it mean that about 100 were observed in mixed flocks? If so, then it must surely refer to some other wader, perhaps Ruff & Reeve which species does not figure in the list but which is very likely to have been present.

2. Page 6: Small Skylark and Redwinged Bush Lark: The song and aerial performance of the two are described as rather similar: the latter's being "in the nature of a good imitation" of the former. I feel there may be some mix-up here since the resemblance, if any, is remote. The performances are described on pp. 41 and 42 of THE BOOK OF INDIAN BIRDS.

3. Page 6: Rain Quail: Is it not more likely that the "small flock (about 12 birds) observed in a newly ploughed field" were in fact Bush Quails? The place and habit certainly suggest the latter.

For the benefit of future observers it seems desirable to straighten out these doubts."

STATUS OF THE THICKBILLED WARBLER, PHRAGAMATICOLA
AEDON IN INDIA

During the recent BNHS/WHO Bird Migration Study field camp in Bharatpur a specimen of the Thickbilled Warbler (Phragamaticola aedon) was taken in one of our mist nets. This is an interesting addition to the Rajasthan bird list and represents a significant extension of its known winter range in India. This large warbler which could easily be mistaken in the field for the Great Reed Warbler (Acrocephalus stentoreus), and no doubt often is, winters at low elevations in the eastern Himalayas and Assam, and mainly on the eastern side of the Peninsula; also in Kerala, Mysore, and southern Maharashtra State (Belgaum etc.). It will be recalled that in autumn 1959 it was recorded for the first time (2 specimens) from as far north in western India as Kutch. Whether these are exceptional records, of vagrants, or whether the species occurs in these parts regularly in winter but was overlooked until mist nets arrived on the scene, remains to be determined. It breeds in the U.S.S.R. from eastern Altai and Kemerovo to Manchuria, and in central Japan.

In the hand, the Thickbilled Warbler can be told without much difficulty from the Great Reed Warbler, in spite of the close superficial similarity in coloration and size between them. The bill is somewhat stouter and shorter (about 20 mm. as against about 25 mm. in the Reed Warbler). The best character, however, is the first primary which is considerably longer than the primary coverts and of the normal shape. In the Reed Warbler, as in all members of the genus Acrocephalus, the first primary is minute (about equal to or only slightly longer than the primary coverts), stiff, attenuated, and pin-pointed. The smaller Blyth's Reed Warbler (Acrocephalus dumetorum), though slightly more olive-brown than Sykes's Tree Warbler (Hippolais caligata rama) presents a parallel confusion with the latter, but here again its pin-like first primary comes to the rescue and is always diagnostic.

Sálim Ali

DATA ON ROSY PASTORS

This season I first saw Rosy Pastors on the western outskirts of Rajkot on the 14th September in the 'pipal' trees at a 'wadi' near distant railway signal of Bhaktinagar Station at about 6.30 p.m. There were nearly 20 to 25 birds in dull and drab colours. There were also nearly 15 to 20 juvenile birds. These were comparatively shy, seeking refuge in the branches of nearby 'neem' and 'pipal' trees at the slightest movement even of crows, doves, etc.

Second time I saw them on the 23rd September at about 6.45 p.m. on a 'neem' tree in the same area. After a few minutes they flew to an adjacent grove of big 'pipal' trees where Common Mynas had gathered for roosting in large numbers. Round about this roosting site there was 'bajari' in the majority of fields.

On enquiry a farmer remarked: "I see comparatively less numbers of 'Vaiya' (Rosy Pastors) in this season. Only two flocks are now seen in this area where there used to be many last year at this season."

Lalsinh M. Raol,
Rajkot.

Naturalists who have always envied mountaineers their opportunities of visiting high places beyond the physical range of the average wind and limb, have also deplored the fact that these fortunate ones should just walk up that mountain and down again without bringing back any of the information that they alone can procure. There are many high altitude Himalayan birds, for instance, about which our knowledge is practically nil. Take the Blue Grandala (*Grandala coelicolor*). It is a conspicuous bird about the size of a myna, with the shape and movements of a Blue Rock Thrush. It is one that cannot be easily overlooked by any one who has the slightest awareness of birds since it keeps in large flocks, and the male has a dazzling silky purple-blue plumage. Its lowest limit in winter is about 9000 ft., while it ascends in summer to breed at elevations between 16,000 and 20,000 ft. in Garhwal, Nepal, and Sikkim. In the half century since 1911, when perhaps its only nests were discovered, numberless mountaineering expeditions and individual mountaineers have climbed up and down through its breeding range, yet nothing more has been added to our knowledge of the bird's biology. And the Grandala is by no means the only high elevation bird which suffers in this way. Only mountaineers could contribute to our knowledge of them, but they don't! And similarly, only mountaineers can get us first-hand information concerning bird migration in the high Himalayas about which also our ideas are largely based on conjecture.

It is heartening in this context to find that at last many mountaineers themselves are beginning to realize this deficiency. In a practical attempt to remedy it the Himalayan Mountaineering Institute have invited Dr. Salim Ali to Darjeeling in November (6th-11th) to give some talks on bird watching and instruction to the staff and trainees of the Institute and others interested in climbing mountains on how to watch birds and what to look out for when they are there. They will also be given practical hints during bird watching excursions in the neighbourhood. It is hoped that in the course of time the results of this 'indoctrination' will become apparent through useful bird notes by mountaineers in the Newsletter and other natural history periodicals.

* * * *

In Newsletter No. 7 (June 1961) an appeal was made for lists of names of birds in use in the various parts of India, either in Hindi or the local language, in an attempt to standardize them for all-India or regional literature. Will readers please make a special effort to assist in this important work? Identification of the bird and the local name, as well as its application must be most carefully checked.

* * * *

PROPOSED INDIAN ORNITHOLOGICAL SOCIETY

A notice of the first meeting of the proposed Society is attached*, and it is hoped that all readers of the Newsletter will make it a point either to attend the meeting in person or send in their considered comments on the items on the agenda. A bird watching excursion could be arranged for Sunday (17 Decr.) if there is sufficient response.

It will be greatly appreciated if those persons who intend to attend the meeting inform the editor of the Newsletter so that some estimate can be made in advance of the number of persons likely to be present at the meeting.

- Botanist, Prof. P.V. Bole's request in Newsletter 10:11 for "a short list of commoner birds ... and how we can check their identity..."

May I suggest that he refer to Dr. Salim Ali's article entitled FLOWER-BIRDS AND BIRD-FLOWERS IN INDIA (J. Bombay nat. Hist. Soc. 35:573-606)? Following up an introduction to the article Dr. Salim Ali gives a 'List of Flowers observed to be regularly frequented by Birds', which contains 54 species of trees and plants in most cases with a description of the flowers, flowering seasons, distribution, followed by the bird visitors to each species. This list covers pages 577-603 of the article. Pages 603-605 contain a 'List of Birds observed to be regular flower-frequenters', and page 606 lists 'Useful Literature' on the subject.

This article together with the sections 'How to recognize Birds in the Field' on the preliminary pages of Dr. Salim Ali's THE BOOK OF INDIAN BIRDS, 6th revised and enlarged edition (1961) (reviewed in an earlier issue of this paper) would help Prof. Bole in knowing the characteristics for differentiation of the various birds mentioned in the above article.

These two references should help Prof. Bole more than ^{the} more month to month list he requests. And once started Prof. Bole will certainly find it easy to identify the commoner birds he comes across during his botanical excursions in the jungles around Bombay.

J.S. Serrao

BLACK DRONGO FEEDING ON CHAMPACA SEEDS?

During a long spell of wet weather in August, swallows, green bee-eaters, and black drongos were observed catching insects under the natural umbrella of trees where insects were still available.

A family party of black drongos frequented a clump of champaca (Michelia champaca) trees in my garden. The trees were in fruit and large numbers of these had split open exposing the bright orange seeds. On one occasion a drongo was observed taking and swallowing a champaca seed. The bright colour of the seed precludes the possibility of any mistake in this observation.

Does the Black Drongo take vegetable food, or is this observation to be considered an exceptional occurrence?

Certainly exceptional, though flower nectar is regularly eaten. - ED. Joseph George, Dehra Dun

Your plan to charge something to cover the expenses of the Newsletter is practical. The same idea was hovering in my mind for the last some time. It is better to continue the Newsletter in its present cyclostyled form, even though your original ambition of publishing 'an illustrated journal of international standard' is really attractive. But to start doing so without proper financial backing may perhaps mean to invite disappointment.

Here may I quote the example of the Indian Astronomical Association, whose annual membership fee is Rs10/-. They first started with a cyclostyled bulletin; afterwards they switched on to a printed bi-monthly 'Dyulok'. It has met with a premature end, at least for the present. The experience of Gujarat Prakriti Mandal whose annual membership is Rs5/- is also not heartening. As a

very modest beginning they started to publish a quarterly journal Prakriti, after a few years of existence, it was postponed. Though started again last year, it is not very regular obviously due to lack of fund.

Thus in order to steer clear of such pitfalls, going slow but steady will prove a wise and sound policy.

Lalsinh M. Raol

ORPHEAN WARBLER (SYLVIA HORTENSIS) VERSUS RUFOUSBACKED SHRIKE (LANIUS SCHACH)

We were operating mist nets at the lakeside of Panelia (Hingol-gadh, Jasdan) on 9th October 1961. The Orphean Warblers which were ringed flew across a small patch of stagnant water and perched on a babool tree (Acacia arabica). A Rufousbacked Shrike was found chasing the warblers around the bushes. On one occasion the 'Butcher bird' almost succeeded in catching the Orphean. But the expert aerobatics and efficient maneuvering saved the cute little central Asian visitor.

Almost 80% of the birds ringed, from the tiny Blyth's Reed Warbler (Acrocephalus dumetorum) to the Hoopoe (Upupa epops) flew in the same direction; but none of them were attacked by the shrike. Then why the exceptional animosity of the shrike towards the warbler?

M. Sasikumar, Kerala

LARGE CUCKOO-SHRIKE

It may be of some interest to record a sighting of the Large Cuckoo-Shrike (Coracina novaehollandiae) in New Delhi recently. The species has been shown as 'doubtful' for the Delhi area and its general distribution excludes Rajasthan and East Punjab. This particular bird, a female, was observed in a garden in Sonehri Bagh on 23.8.1961. It was seen to alight in a thick Bougainvillea creeper along the front wall of the bungalow about 8 ft. from the ground. It was under observation for about 3 minutes when it left the perch to fly directly into the adjoining garden where it was lost to view. Efforts to observe the bird again in the area have proved unsuccessful.

It is, of course, probable that the bird observed was a 'freak' visitor and hence no particular significance attaches to the sighting. However, the fact that it was a female bird and that the nesting season for this species extends from May to October would have offered grounds for speculation as to its status in the area provided a few more sightings could have been made. In spite of daily visits to the area for a week there has been no sign of the bird and I am afraid it must, therefore, be dismissed as a freak.

Capt. N.S. Tyabji, New Delhi

I am indeed happy to read about the proposed Indian Ornithological Society. It will be, no doubt, a treat to the bird lovers and I am sure that the bird watchers and other ornithologists will be benefited.

I wish the Society every success.

R.S. Prasad,
Dept. of Entomology, Haffkine Inst.,
Parel, Bombay 12

On our outing to Chembur area (Bombay) on 1st October 1961 we came across many pairs of Indian Robin (Saxicoloides fulicata), Black-headed Myna (Temenuchus pagodarum), Blackheaded Munia (Munia malacca), Drongo (Dicrurus macrocercus), Spotted Dove (Streptopelia chinensis), Cattle Egret (Bubulcus ibis), and a group of Jungle Babblers (Turdoides somervillei).

We noticed a white specimen among the babblers. The whole body was covered with white feathers. It will not be preposterous to say that it looked like an albino among the other birds. We had a chance to observe it close enough to confirm our observation. More-over the binoculars we carried with us were of great help to us.

K. Janakiraman & R.S. Prasad,
Bombay

Zafar Futehally,
Juhu Lane,
Andheri, Bombay 58.

-----*-----
N O T I C E

A meeting of persons interested in forming an Indian Ornithological Society will be held at the office of QUEST Magazine, Top Floor, Army & Navy Building, 148 Mahatma Gandhi Road, Fort, Bombay 1, on Saturday, the 16th December 1961 at 4 p.m.

AGENDA

1. To decide on the formation, and the aims and objects of the Society.
2. To decide on the annual subscription.
3. To consider whether the Newsletter for Bird Watchers now being brought out by Mr. Zafar Futehally should be taken over by the Society, and to consider the desirability of changing the general form and substance of the Newsletter in any way.
4. To elect an Executive Committee of the Society for the current year.

RECOVERIES OF RINGED BIRDS FROM HINGOLGADH

This year has been rather disappointing for the bird banders in the Saurashtra area, but the period has not been entirely barren. For on the few days of netting carried out in this area, we have had some interesting recoveries both of resident and migratory birds ringed last autumn in this very area. Unfortunately, we did not get any bird ringed either in the Kutch or the Jhallandhar camps. In fact, it is interesting to note that birds recovered have been taken from the very area they had been ringed in the first instance! This suggests that the resident birds do not move very far from their territories, and that the migrants pass along a particular path and that under normal circumstances this does not vary far from the established passage. However, our work is yet in its early stage, and recoveries are not sufficient to permit any hasty conclusions being drawn.

Listed are the recoveries during a few days of sample netting conducted with the help of a small group of amateur (I must add very amateur) bird enthusiasts in the last year's netting areas in the Motisari jungle near Hingolgadh, where the BNHS conducted its camp, and in a patch of scrub some three miles away at the head of the Panelia reservoir, where we had conducted a rather successful netting for four days in October 1960.

No. of Ring	Species	Date of Ringing	Date of Recovery
-------------	---------	-----------------	------------------

Motisari area near Hingolgadh:

AB 279	<u>Pycnonotus cafer</u>	Sept. '60	22. 9. 61
AB 283	<u>Pycnonotus cafer</u>	Sept. '60	9. 9. 61
AB 286	<u>Pycnonotus cafer</u>	Sept. '60	23. 9. 61
AB 403	<u>Pycnonotus cafer</u>	Sept. '60	22. 9. 61
AB 465	<u>Pycnonotus cafer</u>	Sept. '60	24. 9. 61
A 2371	<u>Saxicoloides fulicata</u>	10.9.'60	23. 9. 61
A 3065	<u>Sylvia hortensis</u>	27.9.'60	21. 9. 61

Panelia Tank 3 miles as crow flies from Motisari area:

AB 146	<u>Jynx torquilla</u>	11.10.60	13.10.61
AB 151	<u>Lanius vittatus</u>	11.10.60	9.10.61
AB 513	<u>Lanius schach</u>	20.10.60	8.10.61
B 618	<u>Lanius excubitor</u>	10.10.60	13.10.61

Another interesting recovery has been of a male House Sparrow caught at Jasdan and brought over to Hingolgadh, 12 miles by road, where it was ringed last September with the other birds. On 6.4.61 this bird was happily building in the same room where caught at Jasdan!

On the 16th October, we had set up a small camp at another lake

called Revania hardly a couple of miles to the north of Panelia, where we caught a good number of migrants, but no ringed birds from the area were come across. Last year we had not done any netting in this particular area. More netting of this type will certainly bring us nearer to the proper understanding of bird movements.

K. S. Lavkumar, Rajkot

RUSSIAN ATOMIC TESTS AND OUR MIGRANTS

A recent report in The Times of India stated that thousands of waterfowl are flying from North Russia towards western Europe and that all the ducks and geese shot in the Netherlands are to be examined for radio-activity.

We in India think of the Russian testing grounds in Novaya Zemylaya as very remote indeed. However, it is of interest to know that of the many species of birds breeding there and likely to be affected by radio-activity, winter here with us in India.

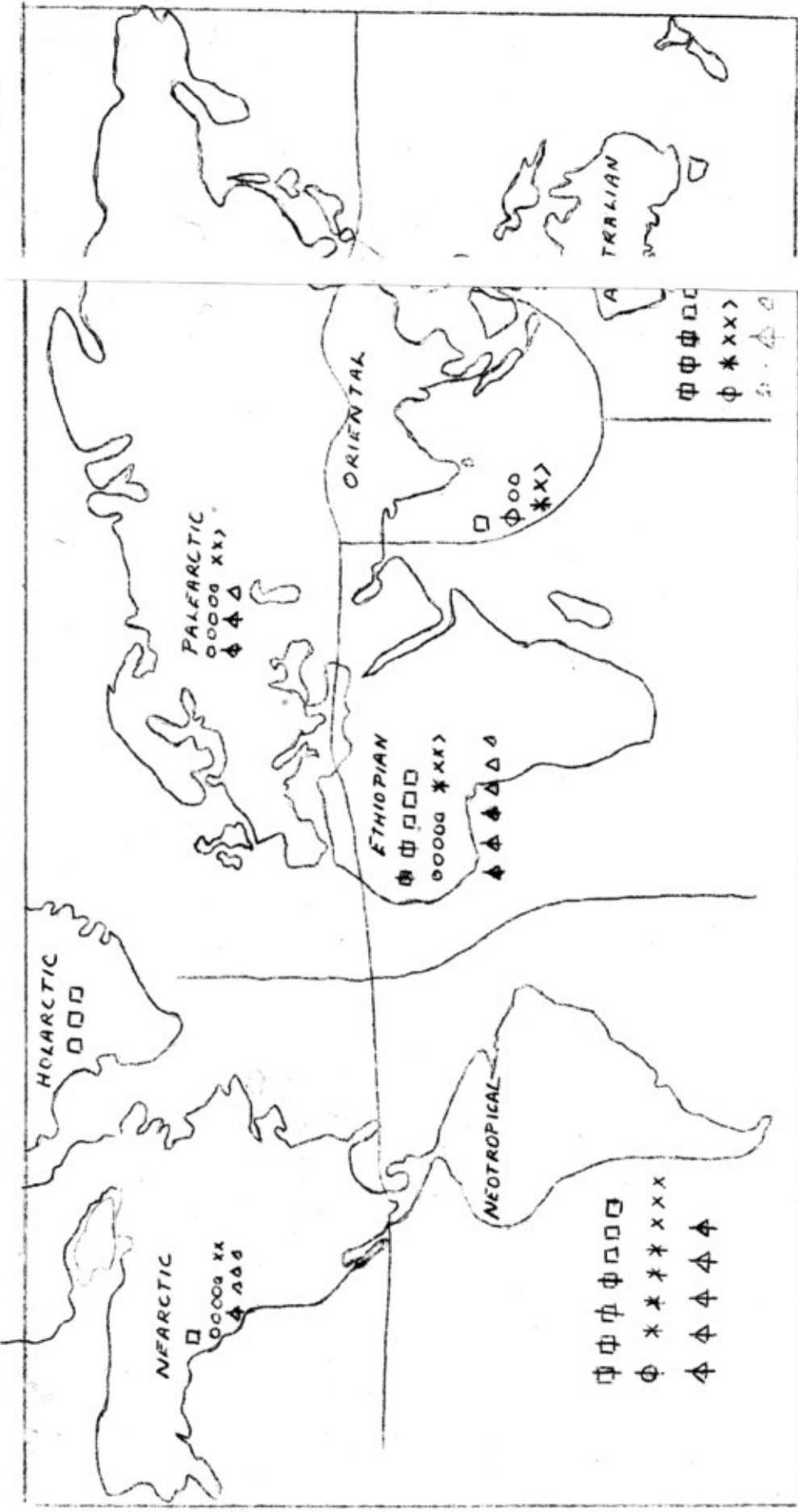
While the general trend of migration is toward western Europe from North Russia, there is every likelihood of many of our wintering birds coming from this atomic testing ground.

There is also a testing ground which the Russians are using at Semipalatinsk in central Asia nearer home, and a very large proportion of our passerines coming for winter are from this region. Though the Russians have not been reported to have tested any nuclear weapons at the latter ground lately, attempts should also be made to check the radio-activity on birds caught during the netting camps run in the country for the BNHS/WHO bird migration cum virus research study project. With the help of the Atomic Energy Commission, this might be possible.

Below is a list of birds breeding on this archipelago, of which those with asterisks might well come down to us. In addition, it will be noticed that bombs of the magnitude used in the recent tests, can mean the total annihilation of entire populations of the many colonial nesters which aggregate in vast numbers for this purpose. Such total disasters will certainly tell on the populations of these birds in years to come. One only hopes that if the Russian scientists are bent on endangering the human race, they have shown some consideration for birds that go there in summer, and have carried out their tests at a time of the year when the birds have moved south to their wintering grounds. Let mankind not include mass murder as a count against him with suicide.

Birds breeding in Novaya Zemylaya:

Whitebilled Diver	*Turnstone	Guillemot
Blackthroated Diver	*Purple Sandpiper	Black Guillemot
Redthroated Diver	*Dunlin	Brunnich's Guillemot
Fulmar	*Stint	
Longtailed Duck	*Grey Phalarope	Puffin
Eider Duck	*Rednecked Phalarope	Snowy Owl
King Eider	Pomarine Skua	Shore Lark
Redbreasted Merganser	Arctic Skua	*White/Pied Wagtail
*Whitebreasted Goose	Longtailed Skua	Wheatear
Barnacle Goose	Glaucous Gull	Lapland Bunting
Bewick's Swan	Ivory Gull	Snow Bunting
*Peregrine Falcon	Kittiwake	Redpoll
Gyr Falcon	Arctic Tern	
*Ringed Plover	Little Auk	



In addition to the birds listed many other species have their breeding ranges very close to the area, and still others might well be passing through during migration, picking up contamination as they do. As still more powerful bombs are detonated, a larger number of species will get involved in the deadly game which the great powers are playing at a hazard to themselves and to the rest of the fair planet the Earth.

Y.S. Shivrajkumar, Jasdan

BIRD WATCHING IN KIHIM

Kihim is a sea side village about 15 miles due south of Bombay City. But this short journey is the privilege only of birds. By road the distance is exactly 85 miles for me, from door to door. One look at Kihim would convince any bird watcher that there would be a multitude of birds here, for within a radius of four miles you have a great variety of country. A wide sandy beach bordered with casuarina trees and coconut palms adjoins mango orchards and wooded country thickly covered with banyan, peepal, babool, karanj, bhend, oond, badam, gulmohur, silk cotton, coral, drumstick, and several trees of the Ficus species. Lantana bushes and Ixora shrubs abound in this area. Behind the orchards there are rice and vegetable fields and in the distance one can see the stone steps leading up to the sacred hill of Kankeshwar. The foothills are covered with karvanda bushes which are such an attraction for the Redwhiskered Bulbul. A mile long tidal estuary curving behind the sea shore is a favourite rendezvous for water birds. In the mangrove bushes there is almost inevitably a Blyth's Reed Warbler chek cheking away, weaving in and out of the foliage looking for food. It was in Kihim that in the early thirties Dr. Salim Ali did his famous research on the Baya Weaver Birds and unravelled the respective roles of the males and females in nest building, 'match making', and other less exciting domestic chores. It was also in Kihim that a straggling Hypocolius was shot, which went to show how far some birds can wander from their normal routes.

So, it is always with the keenest anticipation of meeting old friends and making new acquaintances that I go to Kihim. On 1st October this year, I was on the beach at 6.30 in the morning. Half a dozen Common Sandpipers were flying in characteristic manner close to the surface of the sea. When they landed on the beach their white shoulder stripes left no mistake about their identity. A solitary Pond Heron on the rocks looked almost inanimate, until its lightning lunge gave evidence to the contrary. Sitting on the rocks were two Wiretailed Swallows. Their snow white shirt fronts and chestnut caps glistened even in the soft light of the morning. Later they flew close to me and their wire tails could be clearly seen. I thought I saw a few Redrumped Swallows also, for they looked entirely white from below without the chestnut throat of the Common Swallows. A flock of gulls passed over the sea in V formation but I could not make out whether they were Herring Gulls or Blackheaded Gulls. Both kinds are abundant here in winter. A few Gullbilled Terns suddenly appeared from nowhere. With their black beaks pointing intently downwards, they turned, twisted, and dived without any seeming effort, and it was seldom that they missed their mark. Occasionally, it was clear that they saw their tiny prey in the squelchy surface from as much as thirty feet away, for they descended in a straight line like an aeroplane on a runway, and rose again with the victim in their beak. A wave of Common Green Bee-eaters spread over the beach, and their contortions in the air were not less arresting than those of the gulls. From a distance the deeper trilling of the Large Green Bee-eaters wafted over from the casuarinas. A Common

Kingfisher raced past me on to its favourite fishing post on a low rock in a pool of water left by the eddying tide. The piercing but cheerful call of the Whitebreasted Kingfisher dominated the bird sounds from time to time.

After breakfast I strolled inland, and I was amongst a different set of familiar birds. Magpie Robins, Jungle Babblers, Sunbirds, Flowerpeckers, Ioras, Tailor Birds, Coppermiths, Redvented and Redwhiskered Bulbuls, Crow-Pheasants, and Koels called loudly. Occasionally the nasal wheeze of the Grey Hornbill was heard. Overhead there were Whitebacked Vultures, Ashy Swallow-Shrikes, and Palm Swifts. To hear the liquid notes of the Oriole was as pleasant a sensation as to see the owner of the golden voice. In a stubble field two pairs of Redwattled Lapwings were calling excitedly, and I soon found that the cause of the excitement was a jackal which slunk away on seeing me approach.

In an open meadow a pair of Indian Robins were hopping on the ground, and a Hoopoe working in the soft soil gave the impression that it would be more effective if its beak had been a trifle shorter. A Brahminy Kite disappeared into a casuarina clump with a fish in its beak. It was immediately followed by a Jungle Crow, demanding its share of octroi duty.

This list is by no means exhaustive, but only illustrative of the wide variety of birds that can be seen here during a morning's stroll.

On this day (1st October) I saw no flycatchers, but on the 3th of November, when I was again at Kihim, I saw at least 3 Paradise Flycatchers. One was an adult male in the full glory of its silvery white plumage, a second was a female in her smart brown uniform and black head dress, and a third was a young male with a rich chocolate colour and long tail ribbons. There were several Tickell's Blue Flycatchers in the same area, but they are not as easy to see as the Paradise Flycatchers, and I only knew of their presence through their pleasant jingling calls.

While I was passing a casuarina grove almost at the edge of the sea shore a large kingfisher with rather unusual colours flew past me. I suspected it to be the Blackcapped Kingfisher, for I had seen this bird in Kihim several years ago. After a while I was able to confirm this, for I picked out the bird with my binoculars sitting on a casuarina branch. I was quite struck by the appearance of the bird. It is cobalt blue above, and light rusty below. A snow white collar on the hind neck, a velvety black cap, and an impressive coral red bill, together with its streamlined shape completes a picture of rare beauty. A bird watcher often asks himself: Which is the most beautiful bird that he has seen? It is not an easy question to answer, but I think the Blackcapped Kingfisher is a serious candidate for this honour.

I said earlier that the tidal nullah behind the beach is a favourite haunt of water birds. Walking along here my attention was drawn by a rich deep whistle, and I found a Redshank surrounded by three or four plovers. They were larger and more thick set birds than the Common Sandpiper, and their eyes struck me as being unusually large for a bird of this size. I suspect they were Grey Plovers but cannot be too sure about this.

In the afternoon while I was under a banyan tree, I heard a rather unusual long drawn out sound. I couldn't decide whether it emanated from an urchin with a whistle or from a bird. I scrutinised the tree carefully, and found a pair of Common Green Pigeons on a branch. I memorised the call as carefully as I could and went home to check up with Salim Ali's THE BOOK OF INDIAN BIRDS. Sure enough, regarding the calls of the 'Harial' the

author said that they whistled "with the peculiarly human quality" up and down the scale. There was no doubt that I had heard these birds whistling.

At about 6.30 in the evening I heard a most weird sound come from a casuarina on the beach. With the help of a torch I found the owl responsible for the sound, but beyond being able to make out that it was a very large bird, I could not get any hint for identification. I have memorised the sound of its call carefully, but regret that I cannot put it down in words.

Zafar Futehally

OCCURRENCE OF THE GOLDENBACKED WOODPECKER IN JASDAN, SAURASHTRA

On the morning of 24th October at about 8.00 a.m. I was working at my table in front of a window overlooking the garden. In view and prominently at that are the remains of a tall and gaunt palmyra without any foliage. This prominent perch is used by a variety of birds. I was attracted to look out by a loud drumming of a woodpecker, too loud and startling for that of our common Yellowfronted Pied Woodpecker, Dryobates mahrattensis. There perched on the old stump and against the sky was a large woodpecker which the fieldglasses revealed to my astonishment to be a Goldenbacked Woodpecker. I just could not believe my eyes. Before I could take a second and more careful scrutiny, the bird flew off in its characteristic undulating flight. Taking a chance I followed the bird to a clump of large trees near by, and sure enough I heard the drumming again, and I was able to observe the bird clearly as it worked its way up a branch of a Ficus, and then get out onto a dead branch and preen itself. It was a fine male in wonderful plumage. The red crest on the head looked startling against the blue of the sky. Very soon he flew off again.

In Saurashtra, this is the first record of this fine woodpecker outside the Gir and Girnar area, though why it should not be more widely spread there is no reason other than that there are very few bird watchers. The Goldenbacked Woodpecker is a widely spread bird of the Indian subcontinent and is abundant in nearby Gujarat, and had it been known to be even a local migrant there would be no cause for comment, but this it is not known to be, nor has there been any storm to explain its appearance here. Would some of our readers who might know this bird more intimately than I do tell me if these woodpeckers do in fact show a tendency toward seasonal movements?

K. S. Lavkumar, Jasdán

MIGRATION NOTES FROM NEPAL

I was particularly interested in the note by Mr. Ahi Rudra (Newsletter 11, p. 10) from Darjeeling on the first appearance of the Grey Wagtail in Darjeeling on the 3rd September, as on that day we had a big migration through the Kathmandu Valley, or rather across the forest hills. I saw about 15 birds altogether on the forest streams and feeding along the paths. They were in twos and threes.

Below are the migration notes for 1961 autumn in the Valley.

<u>Motacilla citreola</u>	..... 2nd September
<u>Motacilla cinerea</u>	..... 3rd September

<u>Motacilla alba personata</u>	(This race is very scarce here)	10th September
<u>Motacilla alba dukhunensis</u>	.....	12th September
<u>Motacilla alba alboides</u>	.....	16th September
<u>Motacilla alba leucopsis</u>	.....	12th September
<u>Marsh Harrier</u>	.....	5th September
(It has been 5th or 6th September for the last 12 years.)		
<u>Richard's Pipit</u>	.....	13th September
<u>Anthus hodgsoni</u>	.....	22nd September
<u>Muscicapa parva albicilla</u>	.....	22nd September
(It has been 22-24th September every year for 12 years.)		
<u>Lanius (schach) tephronotus</u>	.....	25th September
(Usually 24th September)		
<u>Vanellus cinereus</u>	.....	14th September
<u>Buteo sp.? (a very white bird)</u>	.....	25th September

(Mrs.) Desirée Proud
British Embassy, Kathmandu

MORE INFORMATION ON THE ROSY PASTOR

In conjunction with Shivraj Kumar's note on the movements of Rosy Pastor in this area (Saurashtra), I would like to add some information. The Pastor does arrive by the end of July in small numbers. Unfortunately I did not get any opportunity of getting out into the country, and there is no reason for the birds to come to town as they do during spring when the figs are ripening, and so I have not seen any of them myself. But they are definitely here by the end of August, and many of my friends did report seeing small flocks during the month, mostly immature birds. On 2nd and 3rd of the month, I saw isolated parties near Rajkot. These birds were adults.

Here at Hingolghadh, there are large numbers in big and small flocks all over the countryside, and especially among the ripening millet fields. They are all in pink adult plumage. It appears that all the birds of the area congregate to roost in the thick babools growing at the head of the Revania Lake some three miles to the north-east of here. Birds collecting here are in their thousands, and their arrival in the evening is spectacular. They depart in the morning at sunrise, and the departing birds rise in great flocks with a startling suddenness. Are these all going to stay on, or are they going to pass on? An effective scheme of banding can explain. Bird banders in India could well spend thought on the problem of netting this bird, and the results would be worthwhile all effort and expense.

K. S. Lavkumar,
Hingolghadh, Jaskan.

ANGELS ON THE MOVE

Extract from the 'Time' Magazine (Asia Edition)
dated October 6, 1961

"Despite the peering binoculars of generations of earnest bird watchers, no one yet really understands the migrations of birds. This is partly because birds are small, fast and hard to see, partly because many species do most of their flying at night. But a new, giant bird watcher has recently taken the field. Radar, used since World War II to track man-made flying machines,

can spot small birds at night or behind clouds, as high as 10,000 ft. or as far off as 50 miles. The secrets of migration are rapidly being unraveled by electronics.

"In Natural History magazine, two physicists (Cambridge University's Dr. I.C.T. Nisbet and M.I.T.'s Dr. R.E. Richardson) team up with Ornithologist W.H. Drury Jr. of the Massachusetts Audubon Society to report the triumphs of electronic bird watching. Even the earliest radars, they say, picked up mysterious targets that operators call 'angels'. Most of the angels proved to be big birds -- sea gulls or wild geese -- but when radars were improved, even small songbirds turned up as targets. They were such a nuisance on radarscopes that M.I.T. scientists worked out an electronic circuit to make radars blind to birds. But Nisbet, Richardson and Drury continued to study the non-electronic aspects of radar bird watching.

"Using a powerful experimental radar at South Truro near the tip of Cape Cod, the scientists soon finished off one well-established notion -- that migrating birds follow coastlines. The all-seeing electronic eye showed that most birds cross the coast without changing direction. The few that are deflected have been so easy to spot as they fly along the beach that human bird watchers erroneously decided that coastline following was standard bird procedure. The Truro radar sometimes showed conspicuous angels moving out to sea at a 40-knot speed. These proved to be dense flocks of sandpipers, plovers, and other shore birds starting non-stop flights to the West Indies or South America.

"Tracked by radar, the migrating birds did not seem so skilled at navigation as bird watchers like to believe. The Truro radar spotted many of them being blown out to sea at night by strong north-west winds. Apparently they did not know, in the darkness, that they were off course. The radar often picked them up heading back toward shore as soon as dawn came, as if in search of familiar landmarks, before they continued flying on their planned migration."

P.K. Rajagopalan,
Virus Research Centre, Field Station,
Sagar, Shimoga Dist.

THE HONEYGUIDE

This strange bird seems to be rather poorly studied in India, and I believe, there is very little information on it in any of the bird literature.

I saw two of these interesting birds this summer in June in the 'Valley of Flowers' near Badrinath. At about 8000 ft. among Rhododendron and Quercus woods, the track to Ghangtra Rest House passes under a great overhanging rock face. High on this rock were attached three large combs of rock bees in occupation, and one deserted, one of wonderful pure white wax. I noticed a grey smudge on the comb which the binoculars resolved into an overall grey bird with brilliant yellow forehead and cheek patches, burrowing busily into the substance of the comb. It must have been feeding on dead grubs or some other insects in the comb, it was not possible to say what. I watched it for some time -- of course I knew what it was, as before leaving for the trek I had occasion to see the excellent picture of the Honeyguide in a few specimen plates of Salim Ali's BIRDS OF SIKKIM published for Sikkim Government schools.

A second bird flew in and tried to evict the first and much scuffling and bickering ensued which sent the birds fluttering and fighting into the air. The outraged occupant of the dinner table soon set the gate crasher fleeing into the forest and returned to alight on a cross branch of a small overhanging bush, where it sat for all purposes like a small dove, very still and all hunched up. From below it was a difficult bird to see and very easily overlooked. It normally seemed to be a very undemonstrative creature. As we had a long way to go, we had to finally leave the bird still vacantly gazing out across the valley.

Had I known at the time how little is known about this bird I would have settled down there on the spot over the abuses of the rest of my less birdy companions.

When we returned no Honeyguide was seen. Apparently I missed noticing it as it may have fallen into one of its day dreams of honey combs full of honey and dopey bees in the bargain!

K. S. Lavkumar

REVIEW

A COLOURED KEY TO THE WILDFOWL OF THE WORLD, by Peter Scott. Published by The Wildfowl Trust, Slimbridge, England.

Into this elegant paper back of just 91 pages, Peter Scott has packed an extraordinary amount of information. As the Introduction says, in this Key "there is a coloured picture of every kind of duck, goose or swan known to exist in the world - 247 kinds". As a confirmed pacifist, as far as Shikar is concerned, I have always been at a disadvantage in identifying wildfowl, when I am out with friends who draw blood every week-end in the open season. But with this handy volume in my possession, I think I will come up to the mark very soon. "The object of the book is to enable anyone even without previous experience to identify any bird within this group (called the family anatidae) which they may see, and to discover its geographical range". The author assumes that the bird has been seen at reasonably close quarters. With modern binoculars this is by no means a difficult task.

The whole plan of the book is directed to make identification of this group of birds as quick and easy as possible. Each of the 23 coloured plates shows a set of birds most similar to one another, and therefore most likely to be confused with one another. The Keys are meant to assist the reader to find the relevant plate which contains the bird he is seeking. This has been most intelligently done. There are Keys according to Size, Shape, Colour, Brightly-coloured Bills, Voice, Behaviour: with so many clues tracking down your quarry becomes very easy.

The printing and the coloured illustrations are of a quality which would associate with Peter Scott. Wherever necessary there are separate illustrations of males and females, and attractive line drawings adorn every page. Five different scales are used for the drawings. This is done with a view to show the maximum detail of each bird. All Teals, for instance, have been shown on one page, and if they had been drawn to the same scale as the Swans, it would have been impossible to show much detail.

There is a brief 5 page chapter on Names and Classification, which gives all the basic facts about the principles of nomenclature and systematics. This is an excellent general introduction to the subject, and explains simply and clearly the system of classification applied to animals and birds. At the end of the book there is an Index of Scientific names, as well as an

Index of English names. So that, in fact, this is an extremely easy reference book to use.

I notice that the method of writing compound names is different to the one recommended by Dr. Salim Ali. Readers will recall that in Newsletter No. 7 of June the system of writing names was explained, and it was stated that hyphens should be used between names only when the name is a compound of two bird names, e.g. Crow-Pheasant, Sparrow-Hawk, Buzzard-Eagle. Otherwise when the first name is only descriptive no hyphens are to be used as in House Crow, Fishing Eagle. Or except when convention is established otherwise, thus Crimsonbreasted Barbet, Ashycrowned Finch Lark, Yellowthroated Sparrow. However, in this volume names are written thus: Ashy-headed Goose, Ruddy-headed Goose, Common White-eye. This is apparently on which experts are not of one mind.

The fastidious care with which this book has been produced is evident from one item on the Errata. It reads: "P. 58. Under Pink-eared Duck delete (except in the North)!" The reference is to Australia, and apparently after the book went to press in 1957 a specimen of this bird must have been found in North Australia. With this correction the author has defined exactly the geographical range of every single bird of the Anatidae family throughout the world.

Zafar Futehally

NOTES AND COMMENTS

Non-bird watchers always enjoy ridiculing members of the opposite species. Here is a note from H.S. Rao of Dehra Dun, which gives an indication of what they feel about us.

"For the benefit of the Late-Riser, by Dumbfowl

"Bird-watchers! wake up on time hereafter -- the 'alarm-doodle' (Pre-dawnia startlesleep Linn.) has arrived this year right on season. This is one of those birds which stand up on two legs early in the morning, stretch out its neck as high as it can go so as to throw its voice as far as it can. This bird has been described by Talim Bali in his book NESTING NEIGHBOURS as the harbinger of the 'season'.

"The 'bubble-bubble' (Bulbulia tarangia Ustad) came two days earlier this year. It has been noticed that its 'red-revelation' every year coincides with barely-concealed Communist violence.

"The 'monsoon-puffpoo' (Barometria cyclonica Meteorol) this year has tallied very well with the weather bulletin. It is characterized by beads of perspiration on its forehead.

"The dry summer of 1961 brought forth a sprightly dance by the 'male-vanity' (Punkhavia mayoora Sanskritist) in our forests. The she of the species thereupon approached the he of the species and waltzed the music of the cicadas."

*

*

*

*

Reproduced below is a review of the Newsletter for Bird Watchers appearing in the International Ornithological Bulletin The Ring Vol. 26, p. 16 (February 1961) edited by Dr.W. Rydzewski, Laboratory of Ornithology, Wroclaw, Poland.

"A 'News Letter for Bird Watchers' No. 3 of February 1961 has been received. These modest, mimeographed sheets are published by

Zafar Futehally of Juhu Lane, Andheri, Bombay 58, and are meant as a forerunner to an ornithological magazine which some ornithologists in India are trying to bring into existence.

"Extracts from letters sent to the editor show plainly that there is a need for such a publication and the idea of founding an Indian Ornithological Society publishing its own magazine is ripe and endorsed by many people. We wish our Indian friends every success in their efforts and expect to be able to announce the realization of their plans in the near future. - Ed."

* * * *

Readers are reminded of the meeting of the proposed Indian Ornithological Society to be held at the office of QUEST Magazine, Top Floor, Army & Navy Building, 148 Mahatma Gandhi Road, Fort, Bombay 1, on Saturday, the 16th December 1961 at 4 p.m.

Quite a few of our readers have responded enthusiastically to this move as can be seen from the Correspondence Section. Readers who happen to be in Bombay or can conveniently come to Bombay are requested to attend, so that we get off to a good start.

CORRESPONDENCE

I have read the notice convening a meeting on 16th December to consider whether a Bird Society should be formed for India. If you decide to do so, please enlist me as a member from the beginning.

H. G. Acharya, Ahmedabad

* * * *

Thank you very much for the copy of 'Newsletter for Bird Watchers' just received. ... I would be very glad to join the bird society when formed and contribute to the cost of the Newsletter if this can be sent to me in England.

(Mrs.) Desirée Proud, Kathmandu

* * * *

Thank you for sending me a copy of 'Newsletter for Bird Watchers' No. 12 which I have found most interesting.

I am very pleased to see that you are planning to form an Indian Ornithological Society and wish you and the Society, when it is formed the best of success.

I am sure that the new Society will be welcomed by all Ornithologists and bird lovers who are interested in the avi-fauna of the Indian region, especially if thought is given to the better protection of Birds, in India, and to the problems of migration to and through India.

W.W.A. Phillips, Sussex, England

* * * *

I am delighted that an Indian Ornithological Society will soon be formed.

I shall be very happy to send my subscription.

Dr. J.P. Joshua, University of Liberia,
West Africa

* * * *

I am extremely grateful to you for so thoughtfully sending me, regularly, copies of the Newsletter for Bird Watchers. Although this is a subject in which I have no experience what-so-ever I have read with very great interest every issue of the Newsletter and not only have I greatly benefitted from these but my interest in the subject has also been aroused.

I am sorry that for obvious reasons it will not be possible for me to attend the meeting to be held on 16th December 1961 to consider the question of formation of an Indian Ornithological Society. If such a society is formed and if, according to its rules and constitution, I would be entitled to become a member I would be very happy to join it.

A.S. Tyabji, Jamshedpur

*

*

*

*

In my note-book I find that about eight years back I had prepared a draft for the formation of an Indian Institute of Field Ornithology, which should have the following programme:

I. Study of Indian birds in all aspects particularly bionomic role of species, distribution, habitats, field characters, general habits, voice, display, nesting, breeding, control methods, calendar fluctuations, local migrations, etc.

II. Making available to agriculturists, foresters and others an easy means to get acquainted with birds and to identify them in the field without killing;

Towards these:

- 1) Display of coloured illustrations of the common Indian birds on the walls of the Institute;
- 2) Taxidermist museum of birds and eggs, with as far as possible illustration of habitat, food and nesting;
- 3) Library of books on birds; general; Indian birds; and local avifaunas;
- 4) Small aviary for study of habits;
- 5) Taxonomic chart of Indian birds;
- 6) Field characters key of Indian birds;
- 7) A model sanctuary for tree birds and another for water birds;
- 8) Chart of bird provinces and sub-provinces;
- 9) Bird censuses;
- 10) Summary of experiments in management of bird population;
- 11) Record of song, call and voice of different birds in India;
- 12) Year charts of different Indian birds;
- 13) Maps of distribution of different birds in India;
- 14) Records of display, particularly (a) threat display, (b) Pre-nuptial display, (c) Post-nuptial display, (d) Fake nest building, and (e) Ceremonies connected with nest building.

Now that the formation of an Indian Ornithological Society is being actively considered, I suggest that one of the objects of the Society should be to establish such an Institute. You might discuss it at the meeting to be held on December 16.

(Mrs.) Jamal Ara,
P.O. Hinoo, Ranchi

*

*

*

*

Thank you very much for your Newsletter. I shall positively attend the meeting of the 16th December at 4 p.m. Please put in a reminder about this in your next bulletin.

In case you arrange the bird watching excursion, please let me know at least a week in advance. I would very much like to attend this too.

B.A. Palkhiwalla, Dadar

*

*

*

*

While I am very happy to hear that the first meeting of the prospective members of the Bird-watchers' Club or Ornithologists' Union is to take place soon, I am equally sorry that the venue is so much out of my reach! Kindly accept my very best wishes for the success of the first meeting and the future of the club.

May I offer a few remarks such as I might have made had it been possible for me to attend?

- 1) The Society (Club) should aim at a large, and not exclusive, membership.
- 2) The rate of subscription will have to be kept as low as possible.
- 3) The birth of the bird-watchers' club should not result in the loss of membership to the B.N.H.S. which has been serving the needs of bird lovers also so far.
- 4) It will be a good idea to keep the Newsletter going for some time, and to come to an understanding with the B.N.H.S. Journal which will enable them to print the more useful or more technical contributions in the B.N.H.S., while contributions of general interest etc. might be printed in the News Letter.

Kindly let me know the rate of subscription decided upon.

K.K. Neelakantan,
Professor, Govt. College, Chittur

*

*

*

*

We do enjoy the Newsletters and they are excellent

Either I or my wife Rhona Ghate to whom the letters are addressed will attend the meeting on Saturday, the 16th December and one of us will join the proposed Society.

B.G. Ghate, Bombay

ERRATUM

Newsletter No. 11 (October 1961), 11th word in the third line of paragraph 2 on page 4:
substitute red for yellow

Zafar Futehally,
Juhu Lane,
Andheri,
Bombay 40